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 healthcare 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: Student may contact the instructor or department for information.

AHS 2400 Writing a Personal Statement
S-N only, 1 credit(s);
Instructor: Rosand, Jennifer A
Description: Develop a competitive personal statement. Designed for students in health program in coming year. As students engage in self-assessment, writing assignments, online discussions and peer reviews they will develop the skills needed to communicate effectively in a variety of health profession settings.

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: Student may contact the instructor or department for information.

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: LaFave, Steven John
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: 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: See attached syllabus
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: White, Paul Andrew
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: Nam, Jonathan S
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, Paul
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: White, Paul Andrew
Description: This course introduces the topic of management accounting. 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 introduce managerial accounting, which directly relates to managerial decision-making. The course will introduce the design and use of costing systems with specific emphasis on activity based costing systems. The role of managerial accounting in operational and strategic decisions of business firms will also be emphasized.
Style: 40% Lecture, 30% Small Group Activities, 30% Demonstration.
Grading: 30% mid exam, 32% final exam, 25% quizzes, 13% class participation.

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

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

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

**Acct 5101 Intermediate Accounting I**
- **A-F only, 4 credit(s);**
- **Instructor:** Tranter, Terry L
- **Description:** The class will primarily utilize lectures and student questions to cover the material. Grades will be based on total points earned on three midterms (100 points each), two written assignments which will be graded for writing style, punctuation, and grammar as well as content (40 points each), and a final (180 points). Exams are almost exclusively problem oriented and require free-hand computations (no multiple choice or true/false). Students will be expected to do substantial problem assignments outside class which are not formally graded, but are necessary to master the material. Students should expect to spend 8-12 hours outside of class each week.

**Acct 5101 Intermediate Accounting I**
- **A-F only, 4 credit(s);**
- **Instructor:** Tranter, Terry L
- **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:** Zhang, Ivy Xiying
- **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 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 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 8800 Empirical Research: Topics
2 credit(s), max credits 4;
Instructor: Khan, Mozaffar
Description: Student may contact the instructor or department for information.

Acct 8811 Information Economics I
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 5011 Foundations in Addiction Studies
A-F only, 2 credit(s);
Instructor: Wawro, George
Description: Student may contact the instructor or department for information.

AddS 5011 Foundations in Addiction Studies
A-F only, 2 credit(s);
Instructor: Wamsley, Debra S
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. Theoretical perspectives/concepts related to etiology of alcohol/drug dependency/abuse. Emphasizes bio-psycho-social models of addiction/disease: psychodynamics, social learning, contingency, family systems. Connection of theory to empirical research.
Style: Online
Grading: See attached syllabus

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

AddS 5021 Introduction to Evidence Based Practices and the Helping Relationship
A-F only, 3 credit(s);
Instructor: Boisen, Laura Sue

AddS 5021 Introduction to Evidence Based Practices and the Helping Relationship
A-F only, 3 credit(s);
Instructor: Wamsley, Debra S

AddS 5031 Applied Psychopharmacology
A-F only, 2 credit(s);
Instructor: Frenz, David Arthur
Description: Categories of psychoactive drugs. Medicines to treat mental disorders. Substances such as alcohol, nicotine, cocaine, and marijuana. What occurs physiologically when someone takes a psychoactive drug.

AddS 5041 Methods and Models I: Motivational Counseling
A-F only, 2 credit(s);
Instructor: Van Cleve, Michael
Description: Concepts of Motivational Interviewing. Spirit of MI. Primary counseling skills. Working with resistance. Identifying/eliciting change talk. Transitioning into change, negotiating a treatment plan. Strengths/shortcoming of MI.

AddS 5041 Methods and Models I: Motivational Counseling
A-F only, 2 credit(s);
Instructor: Isenhart, Carl E
Description: Concepts of Motivational Interviewing. Spirit of MI. Primary counseling skills. Working with resistance. Identifying/eliciting change talk. Transitioning into change, negotiating a treatment plan. Strengths/shortcoming of MI.

AddS 5051 Methods and Models II: Cognitive Behavioral Therapy
A-F only, 2 credit(s);
Instructor: Van Cleve, Michael
Description: Components of cognitive model. Assessment, case formulation, automatic thoughts, core beliefs, cognitive restructuring, behavior change elements, therapeutic relationship. Students learn, practice and master key concepts.

AddS 5061 Foundations of Group Work
A-F only, 3 credit(s);
Instructor: Rohovit, Julie L
Description: Designing/facilitating therapy groups. Intra-/inter-personal dynamics, leadership skills, developmental aspects, ethical issues. Application to therapy of chemically addicted individuals. Lectures, discussion, experiential exercises, small groups, readings.

AddS 5071 Foundations of Co-occurring Disorders
A-F only, 2 credit(s);
Instructor: Becher-Ingwalson, Ann M
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. Understanding the mentally ill and chemically abusive or dependent client. Intervention, advocacy, education, and support for client and those that are part or his/her environment. Social, environmental, and multicultural factors that contribute resources for these clients.
Style: Online
Grading: See attached syllabus

AddS 5081 Multicultural Foundations of Behavioral Health
A-F only, 3 credit(s);
Instructor: Wamsley, Debra S
Description: What is culture? How might culture, cultural practices, and history be significant in the use/abuse of substances? How is culture relevant to the attitudes/practices in the prevention/treatment of substance use/abuse? Multicultural counseling and cultural competence in addiction counseling. People as individuals. Clinician's own cultural worldview/ other cultural worldviews.

AddS 5091 Assessment and Treatment Planning I
A-F only, 3 credit(s);
Instructor: Van Cleve, Michael
Description: Core addictions counseling functions including clinical assessment, case management, documentation treatment planning, and ethical issues. Students begin process of securing internship.

AddS 5091 Assessment and Treatment Planning I
A-F only, 3 credit(s);
Instructor: Rohovit, Julie L
Description: Student may contact the instructor or department for information.

AddS 5091 Assessment and Treatment Planning I
A-F only, 3 credit(s);
Instructor: Wawro, George
Description: Core addictions counseling functions including clinical assessment, case management, documentation
AddS 5996 Internship in Substance Abuse Counseling  
S-N only, 1-8 credit(s), max credits 8, 4 completions allowed;  
Instructor: Rohovit, Julie L  
Description: Supervised field work experience. Practical application of substance abuse counseling. Assessment,  
treatment planning, case management.

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

AEM 2011 Statics  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Force and moment vectors, resultants. Principles of statics and free-body diagrams. Applications to simple  
trusses, frames, and machines. Distributed loads. Internal forces in beams. Properties of areas, second moments. Laws of  
friction. 3 credits. Prerequisites: IT student, Phys 1301, concurrent registration in Math 2374 or equivalent.

AEM 2012 Dynamics  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Review of particle dynamics. Mechanical systems and rigid-body dynamics. Kinematics and dynamics of  
plane systems. Rotating coordinate systems in 2-D. Energy and momentum of 2-D bodies and systems. Vibrations.

AEM 2021 Statics and Dynamics  
A-F only, 4 credit(s);  
Instructor: Ketema, Yohannes  
Description: Force and moment vectors; resultants. Principles of statics. Applications to simple trusses, frames, and  
machines. Distributed loads. Properties of areas. Laws of friction. Review of particle dynamics. Mechanical systems and  
rigid-body dynamics. Kinematics and dynamics of plane systems. Energy and momentum of 2-D bodies and systems.

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: Problem Solving with Python: An Introduction  
S-N only, 1 credit(s), max credits 4, 4 completions allowed;  
Instructor: Mokhtarzadeh, Hamid  
Description: Student may contact the instructor or department for information.

AEM 3101 Mathematical Modeling and Simulation in Aerospace Engineering  
A-F only, 2 credit(s);  
Instructor: Balas, Gary John  
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: Nichols, Joseph W  
Description: Student may contact the instructor or department for 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 4321 Automatic Control Systems
A-F only, 3 credit(s); [4303 or equiv or ME 3281 OR EE 3015], [CSE upper div or grad student] Credit will not be granted if credit has been received for: EE 4231;
Instructor: Georgiou, Tryphon T
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 4371 Helicopter Aerodynamics
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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

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: Longmire, Ellen K
Description: (Writing Intensive Course) Experimental methods and design in fluid and solid mechanics. Wind tunnel and water channel experiments involving flow visualization, pressure, velocity, and force measurements. Experimental measurement of stresses, strains, and displacements in solids and structures, including stress concentrations, aerospace materials behavior and structural dynamics. Computerized data acquisition and analysis, error analysis, data reduction techniques. Experimental design, written and oral lab reports required.

AEM 4602W Aeromechanics Laboratory
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Shield, Thomas William
Description: (Writing Intensive Course) Experimental methods and design in fluid and solid mechanics. Wind tunnel and water channel experiments involving flow visualization, pressure, velocity, and force measurements. Experimental measurement of stresses, strains, and displacements in solids and structures, including stress concentrations, aerospace materials behavior and structural dynamics. Computerized data acquisition and analysis, error analysis, data reduction techniques. Experimental design, written and oral lab reports required.

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

AEM 4896 International Professional Experience
A-F only, 3 credit(s);
Instructor: Garrard, William L
Description: Student may contact the instructor or department for information.

AEM 5251 Computational Fluid Mechanics
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: Gebre Egziabher, Demoz
Description: Student may contact the instructor or department for information.

AEM 5501 Continuum Mechanics
3 credit(s);
Instructor: Tadmor, Ellad B
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 8495 Advanced Topics in Aerospace Systems
A-F only, 1-4 credit(s), max credits 9, 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
Aerospace Studies

Air 1000 Leadership Laboratory
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Peterson, Major Chris
Description: The Foundations of the United States Air Force Air 1104 introduces the mission and organization of the Air Force, officership 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 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, officership 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: Hoopes, David A
Description: The Foundations of the United States Air Force Air 1204 introduces the mission and organization of the Air Force, officership 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 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 in 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

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

African American and African Studies

Afro 1012 Black Worlds in Global Perspective: Challenges and Changes
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Coleman PhD, Taiyon J
Description: Student may contact the instructor or department for information.
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 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: Student may contact the instructor or department for information.

Afro 3001 West African History: Early Times to 1800  
3 credit(s);Credit will not be granted if credit has been received for: HIST 3454;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: See attached syllabus

Afro 3112 In the Heart of the Beat: the Poetry of Rap  
A-F only, 3 credit(s);  
Instructor: Coleman PhD, Taiyon J  
Description: Student may contact the instructor or department for information.

Afro 3120 Social and Intellectual Movements in the African Diaspora  
A-F only, 3 credit(s);Credit will not be granted if credit has been received for: AFRO 5120;Meets CLE req of Global Perspectives  
Instructor:
Afro 3205 History of South Africa from 1910
3 credit(s); Credit will not be granted if credit has been received for: HIST 3435;
Instructor: Pohlandt-McCormick, Helena
Description: Student may contact the instructor or department for information.

Afro 3432 Modern Africa in a Changing World
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HIST 3432; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Isaacman, Allen F
Description: Student may contact the instructor or department for information.

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 Literature; 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 3627 Seminar: Harlem Renaissance
3 credit(s); Credit will not be granted if credit has been received for: ENGL 5597;
Instructor: Wright, John S
Description: Student may contact the instructor or department for information.

Afro 3864 African American History: 1619 to 1865
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HIST 3864;
Instructor: Lindquist, Malinda A
Description: Student may contact the instructor or department for information.

Afro 3866 The Civil Rights and Black Power Movement, 1954-1984
3 credit(s); Credit will not be granted if credit has been received for: AFRO 5866;
Instructor: Mayes, Keith A
Description: Student may contact the instructor or department for information.

Afro 3910 Topics in the African Diaspora.: Conflict & Peace in Eritrea, Ethiopia and Somalia
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Araia, Semhar
Description: The Horn of Africa is a diverse, complex region whose topography, natural resources, multi-ethnic groups and varied interests all too often lead to armed conflict and regional wars. Over the last fifty years, the Horn has undergone massive transformation through successive interstate and intrastate wars between armed groups and state authorities. Systematic and ongoing conflicts continue to plague the region, existing in low-level, high-intensity and highly militarized environments. These conflicts are exacerbated and often intensified due to reoccurring natural disasters, foreign intervention and geopolitical threats and interests. This course will introduce students to the modern political history of the Horn of Africa and examine the nature of conflict and peace in Eritrea, Ethiopia and Somalia. The specific themes that will
be covered include post-colonization independence, reoccurring and systematic conflict, humanitarian crises, and the role of foreign aid, development and peacemaking. The course will also focus on the Horn’s relations with the international community with emphasis on US foreign policy, conflict resolution, security, and development in the region.

Afro 4105 Ways of Knowing in Africa and the African Diaspora
A-F only, 3 credit(s);
Instructor: Brewer, Rose Marie
Description: Student may contact the instructor or department for information.

Afro 4991W Thesis Research and Writing
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Onishi, Yuichiho
Description: Student may contact the instructor or department for information.

Afro 5120 Social and Intellectual Movements in the African Diaspora
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: AFRO 3120;
Instructor: Atkins, Keletso E
Description: Student may contact the instructor or department for information.

Afro 5627 Seminar: Harlem Renaissance
3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: AFRO 3627;
Instructor: Wright, John S
Description: Student may contact the instructor or department for information.

Afro 5876 Proseminar: Approaches to African Development
3 credit(s);
Instructor: Okediji, Tade O
Description: Student may contact the instructor or department for information.

Afro 5910 Topics in African American and African Studies: Conflict & Peace in Eritrea, Ethiopia and Somalia
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Araia, Semhar
Description: Student may contact the instructor or department for information.

Afro 5910 Topics in African American and African Studies: Anthropology of American Culture
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ho, Karen
Description: Student may contact the instructor or department for information.

Afro 5932 The Production of Knowledge, Negotiating the Past, and the Writing of African Histories
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: HIST 5932;
Instructor: Isaacman, Allen F
Description: Student may contact the instructor or department for information.

Afro 8202 Seminar: Intellectual History of Race
3 credit(s);
Instructor: Brewer, Rose Marie
Description: Student may contact the instructor or department for information.

Agricultural, Food, and Environmental Education 146 Ruttan Hall

AFEE 1001 Introduction to Agricultural Education and Extension
1 credit(s);
Instructor: Smith, Amy Rae
Description: Student may contact the instructor or department for information.

AFEE 2051 Current Technical Competencies
AFEE 2221 People Skills for Leadership
A-F only, 3 credit(s);
Instructor: Swiggum, James Frederick
Description: Student may contact the instructor or department for information.

AFEE 2421 Professional Communication for Agriculture, Food, and the Environment
A-F only, 3 credit(s);
Instructor: Swenson, Rebecca Dean
Description: This course is open to any student who wants to practice communicating effectively with many audiences. Students who want to be the next generation of teachers, scientists, industry leaders, advocates, and policy makers must learn how to communicate with the public, their peers, and other audiences. Success in the professional world requires more than mastery of technical knowledge; professionals must be able to communicate information and ideas with clarity, logic, and strategy in order to make an impact and enact change. The goal of this course is to help students practice foundational writing and speaking skills needed to join current conversations about agriculture, food, and natural resource use and to be successful in a wide variety of careers. For the final project, students work in teams to put together a symposium, modeled after the TED Talks conference (www.ted.com), in which they practice presenting engaging information to different audiences about important issues related to food, agriculture, or environmental challenges and solutions.
Style: 50% Lecture and Discussion, 50% Course Projects and Activities.
Grading: 60% Oral and Written Assignments; 20% quizzes; 20% Attendance, Discussion Board Postings and Participation
Exam Format: No exams. 3 quizzes. (Two quizzes are open-book format; the third is a team-based quiz.)

AFEE 3096 Experiential Learning: Production and Business
1-8 credit(s), max credits 12, 12 completions allowed;
Instructor: Swenson, Rebecca Dean
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 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 5111W 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 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 5290 Seminar: Current Issues in Agricultural Education and Extension
1-3 credit(s), max credits 6, 6 completions allowed;
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: Smith, Amy Rae
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: Swenson, Rebecca Dean
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: Smith, Amy Rae
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: Smith, Amy Rae
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: Smith, Kevin Paul
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);  
Instructor: Smith, Kevin Paul  
Description: Student may contact the instructor or department for information.

Agro 2501 Plant Identification for Urban and Rural Landscapes  
2 credit(s); Biol 1009 or equiv Credit will not be granted if credit has been received for: AGUM 2240;  
Instructor: Durgan, Beverly R  
Description: Intended to familiarize undergraduate students with plant and weed species that are important in turf, horticulture, forestry, and crop production systems. Emphasis on identification of native grasses and forbs, field crops, and weed species found in Minnesota and the upper midwest area of the U.S.A. Students will also study plant life cycles, habitats, and relationships to humans.

Agro 4093 Directed Studies for Advanced Students  
1-4 credit(s), max credits 12, 12 completions allowed;  
Instructor: Brakke, Mary Patricia  
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.

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 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
Agro 4888 Issues in Sustainable Agriculture
2 credit(s);
Instructor: Murray, Helene
Description: Study the social, economic, political and environmental aspects of 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: Student may contact the instructor or department for information.

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 8201 Advanced Plant Breeding
A-F only, 3 credit(s); STAT 5301 or equiv
Credit will not be granted if credit has been received for: HORT 8201;
Instructor: Anderson, James Allan
Description: Principles/current methods involved in breeding agronomic and horticultural crops. Use of genotype/environment data to increase genetic gain, population improvement, parent building, alternative selection strategies, breeding for special traits, and new approaches.

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.

American Indian Studies

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 1002 Indigenous Peoples in Global Perspective
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: POL 1019; Meets CLE req of Global Perspectives
Instructor: Wilkins, David E
Description: This course focuses on the social, cultural and political relationship between selected indigenous peoples and the nation-states that settled in their territories and explores the various ways these states attempted to exterminate, incorporate, and segregate the native peoples they encountered. This class can be taken as an American Indian Studies course or a Political Science Studies course. It has been cross-listed. This course fulfills CLE requirements of Global Perspective Theme.
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: Ghebregzi, Alex Anthony
Description: Student may contact the instructor or department for information.

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 3109 Anishinaabe Literature
A-F only, 3 credit(s); 3103 Credit will not be granted if credit has been received for: AMIN 5109;
Instructor: Jones, Dennis
Description: Student may contact the instructor or department for information.

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 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 3205 Introduction to Aztec, Maya, and Inka Art, from Ancient Times to the Colonial Period
3 credit(s); Credit will not be granted if credit has been received for: ARTH 3205; Meets CLE req of Arts/Humanities
Instructor: Afanador-Pujol, Angelica J
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
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.

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**Amln 3303 American Indians and Photography**

- **3 credit(s); Credit will not be granted if credit has been received for:** AMLN 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 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.

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**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:** Lawson, Angelica
- **Description:** Student may contact the instructor or department for information.

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**Amln 3501 American Indian Tribal Governments and Politics**

- **A-F only, 3 credit(s); Credit will not be granted if credit has been received for:** POL 3701
- **Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives**
- **Instructor:** Wilkins, David E
- **Description:** This course examines the origins, status, structures, and powers of American Indian governments and the distinctive politics associated with these First Nations who constitute the third set of sovereign governments in the U.S. whose existence long predates the federal and state governments. This course fulfills CLE requirements of Social Science core and Citizenship and Public Ethics themes.

**Style:** 25% Lecture, 75% Discussion.

**Grading:** 20% mid exam, 20% final exam, 40% reports/papers, 20% other evaluation. weekly questions based on readings

**Exam Format:** long essays

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**Amln 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

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**Amln 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 Mdewakanton, Wahpekutes, Wahpeton, and the Sisseton. 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: Chang, David Anthony
- **Description:** American Indian history is far more than just the history of the loss of lands to the United States--which is the way we normally encounter it in our textbooks. It is the history of societies that were changing long before Columbus ever stumbled ashore in the Caribbean. It is the history of changing ideas about men and women, humans and spirits, people and animals. It is the story of work--whaling and the fur trade and farming and more. It is the story of grand confederacies of native nations, individual marriages, religious conflict, and intrigue, alliances, and warfare among scores of native societies, five empires, and two new settler nations. This is the rich and diverse history we will explore together in this class. Students should come prepared to use their intellectual talents, to draw on their knowledge of history, to exercise their reading and writing abilities, and to share their ideas.
- **Style:** 50% Lecture, 10% Film/Video, 40% Discussion.
- **Grading:** 20% mid exam, 25% final exam, 35% reports/papers, 20% class participation. Class participation includes discussion and also occasional map quizzes, etc.
- **Exam Format:** Take-home essay format.

**AmIn 4820W Senior Seminar**
- A-F only, 3 credit(s);
- Meets CLE req of Writing Intensive
- Instructor: Child, Brenda J
- **Description:** Student may contact the instructor or department for information.

**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: Lawson, Angelica
- **Description:** Student may contact the instructor or department for information.

**AmIn 5802 Art of the Inka and their Ancestors**
- 3 credit(s);
- Credit will not be granted if credit has been received for: ARTH 5802;
- Instructor: Afanador-Pujol, Angelica J
- **Description:** Student may contact the instructor or department for information.

**AmIn 5890 Problems in American Indian History**
- 3 credit(s);
- Credit will not be granted if credit has been received for: HIST 5890;
- Instructor: O’Brien, Jean Maria
- **Description:** Student may contact the instructor or department for information.
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.

ASL 3800 ASL Independent Study: Extended Study
S-N only, 1-3 credit(s), max credits 6;
Instructor: Applebee, Shirley D
Description: Student may contact the instructor or department for information.

ASL 3800 ASL Independent Study: Extended Study
S-N only, 1-3 credit(s), max credits 6;
Instructor: Siebert, Renee Millie
Description: Student may contact the instructor or department for information.

ASL 3800 ASL Independent Study: Extended Study
S-N only, 1-3 credit(s), max credits 6;
Instructor: Buchholz, Sandra Kay
Description: Student may contact the instructor or department for information.

ASL 3800 ASL Independent Study: Extended Study
S-N only, 1-3 credit(s), max credits 6;
Instructor: Johnson, Rania Jung
Description: Student may contact the instructor or department for information.
ASL 3800 ASL Independent Study: Extended Study  
S-N only, 1-3 credit(s), max credits 6;  
Instructor: Zeibot,Alexander  
Description: Student may contact the instructor or department for information.

ASL 3800 ASL Independent Study: Extended Study  
S-N only, 1-3 credit(s), max credits 6;  
Instructor: Neubarth,Bradley E  
Description: Student may contact the instructor or department for information.

ASL 3800 ASL Independent Study: Extended Study  
S-N only, 1-3 credit(s), max credits 6;  
Instructor: Bianco,Sara  
Description: Student may contact the instructor or department for information.

ASL 3800 ASL Independent Study: Extended Study  
S-N only, 1-3 credit(s), max credits 6;  
Instructor: Vintinner,Ishaa  
Description: Student may contact the instructor or department for information.

American Studies  104 Scott Hall

AmSt 1401 Comparative Genders and Sexualities  
3 credit(s);Meets CLE req of Diversity and Soc Justice US  
Instructor: Fajardo,Kale Bantigue  
Description: Sissies, Sex Workers, and Seamen: How and why do people understand their genders and sexualities differently in diverse cultural contexts and locations? How has capitalism, colonialism, immigration, migration, and globalization impacted genders and sexualities in North America, Asia, the Pacific, Latin America, and Africa? The course stresses studying genders and sexualities within a cross-cultural and comparative (e.g. international/regional) framework, and also emphasizes an intersectional approach: that is, in order to analyze gender and sexuality, we must also think about how race, class, ethnicity, nationality, and geography "inform" how gender and sexuality are embodied, experienced, performed, and/or regulated, and we must also consider histories of capitalism, colonialism, migration, and globalization. Participants will read an eclectic mix of theory, history, literature, and ethnography, and watch diverse international and U.S.-based films in order to better understand and analyze genders and sexualities in different geographic, cultural, and political contexts. The course aims to promote cross-cultural learning about the gender and sexual diversity that is part of the histories and cultures of people who immigrate or reside in the United States  
Style: 35% Lecture, 30% Discussion. Films  
Grading: 40% reports/papers, 20% class participation, 40% other evaluation. final paper  
Exam Format: No Exam

AmSt 1905 Freshman Seminar: Pursuit of Fairness: History of Affirmative Action  
3 credit(s);  
Instructor: Pierce,Jennifer L  
Description: With the recent Supreme Court decision, Fischer v. the University of Texas, debates about affirmative action have again seized national attention. What is affirmative action? Is this social policy a fair one? This seminar focuses on the emergence of affirmative action as a policy and its varied rationales in the twentieth century United States. In contrast to popular belief, affirmative action as a policy did not emerge full-blown in the 1970s, its origins can be traced to the 1930s and President Franklin Delano Roosevelt’s New Deal policy agenda. We follow the trajectory of these early policy formulations through WWII to the influential Brown v. Board of Education decision which ruled the ?separate but equal? doctrine in public facilities unconstitutional. Next, we move to our post-civil rights era (1965 to the present) and examine the varied meanings and debates about affirmative action in news media accounts, the law, and in academic research. In addition, we consider how stories about affirmative action circulate within American popular culture such as Hollywood films. Finally we consider the future of this controversial social policy.  
Style: 50% Lecture, 25% Film/Video, 25% Discussion.

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: Karjianen,David J  
Description: The attacks on the World Trade Center and the Pentagon on September 11th are events which suspended the normal workings of the country economically, politically, and culturally. This course explores the historical context of 9/11, situating the attacks in US military, diplomatic, and geopolitical histories. We will explore questions such as how 9/11
is similar or different from other attacks on the United States or US interests, what the historical relationship of terror to U.S. foreign policy, and how different countries have viewed the events. The cultural importance of political events since September 11th will be examined through an historical understanding of past conflicts, particularly how wars have shaped the nation's understanding of itself, its enemies, and its place in the world. The class will also look how 9/11 has been remembered and how the politics of memory shape notions of citizenship and nationhood. We will examine responses to 9/11 and its aftermath in art, literature, and film, which will also serve as a unique introduction to the interdisciplinary methods characteristic of American Studies scholarship.

Style: 50% Lecture, 50% Discussion.
Grading: 35% mid exam, 35% final exam, 30% reports/papers.

AmSt 3113W America's Diverse Cultures
3 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Child,Brenda J
Description: The Twin Cities are global cities in an international state! Minnesota, contrary to the stereotypes, has always been a racially and culturally diverse state. This course will examine what diversity and pluralism mean and how they work in the United States by focusing on Minnesota. How did the cultural groups who contributed to the making of Minnesota influence the development of ideas, laws, and movements in the state and beyond? As we focus on Minnesota as a site of cultural diversity, we will address the following questions: Who are the people indigenous to Minnesota and what did they experience with the founding of the state? How and why did specific groups of people travel and move to Minnesota? How have global politics, the economy, and work, influenced decisions to choose Minnesota? How have groups built community in Minnesota? What artistic, literary, and other contributions have they made to Minnesota life? We will apply these questions to Native peoples, early immigrants from Europe, and recent immigrants and refugees. Students will read historical accounts, memoirs, novels and view films and art.

Style: 50% Lecture, 25% Discussion. Film or Speaker
Grading: 25% final exam, 50% reports/papers, 25% class participation.
Exam Format: essay, short answer

AmSt 3113W America's Diverse Cultures
3 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Lewis,Abram Joseph
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 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: McNally,Andrew John
Description: Student may contact the instructor or department for information.

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.

Style: To be announced instructor will provide specific information
Grading: Grading will be determined by to be announced instructor
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 4101 Gender, Sexuality, and Politics in America
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: STAFF
Description: Ways public and private life intersect through the issues of gender, sexuality, family, politics, and public life; ways in which racial, ethnic, and class divisions have been manifest in the political ideologies affecting private life. Class time, workload, grading and exam format are determined by instructors. The focus of each instructor varies with the instructor's expertise.
Style: Will be determined by course instructor
Grading: Will be determined by instructor

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

AmSt 8021 Historical Foundations of American Studies
3 credit(s);
Instructor: Prell, Riv-Ellen
Description: Student may contact the instructor or department for information.

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

AmSt 8920 Topics in American Studies: Public History: Guantanamo Public Memory Project
3-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Murphy, Kevin P.
Description: Student may contact the instructor or department for information.

AmSt 8920 Topics in American Studies: New Directions in US Based Queer Studies
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Fajardo, Kale Bantigue
Description: In the last decade, queer studies has seen an explosion of dynamic critical works, ranging from Jasbir Puar's Terrorist Assemblage (2007), Jack Halberstam's The Queer Art of Failure (2011), Sara Ahmed's Queer Phenomenology (2006), Mark Rifkin's When Did Indians Become Straight?: Kinship, the History of Sexuality, and Native Sovereignty (2011), and Brenna Munro's South Africa and the Dream of Love to Come (2011), just to name a few. This seminar prioritizes recently published US-based and international queer studies scholarship, which are vigilant to the fact that sexuality is intersectional, not extraneous to other modes of difference. We'll explore what queer studies has to say (or not) about such complex issues such as indigeneity, race, poverty, neo/post/colonialism, war, apartheid, neoliberal capitalism, tourism, urbanization, migration/immigration, citizenship, space/place/temporality, and knowledge/power. Since the seminar addresses both US and international queer studies texts, the seminar also strives to develop comparative, postcolonial/decolonized, and transnational reading practices and analyses among seminar participants.

AmSt 8970 Independent Study in American Studies
1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Pierce, Jennifer L
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;
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: 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: 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 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
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 2013 Beginning Livestock Judging
2 credit(s);
Instructor: Rozeboom,Kyle James
Description: Visual evaluation of beef cattle, swine, and sheep for type, muscling, degree of finish, structure, and soundness. Short oral presentations. Preparation for collegiate livestock judging competition.

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 will be responsible for care of horses 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 two 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: Raeth-Knight, Mary Louise
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 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 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:** Palmer PhD, Melissa L
- **Description:** Student may contact the instructor or department for information.

**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, types 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 3509 Animal Biotechnology
3 credit(s);
Instructor: Palmer PhD, Melissa L
Description: Student may contact the instructor or department for information.

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: 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 
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: 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: 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: Whealon, Jonathan E 
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: 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: 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: 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 4601 Pork Production Systems Management  
4 credit(s);  
Instructor: Rozeboom, Kyle James  
Description: Student may contact the instructor or department for information.

AnSc 4601 Pork Production Systems Management  
4 credit(s);  
Instructor: Rozeboom, Kyle James  
Description: Student may contact the instructor or department for information.

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

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

AnSc 5625 Nutritional Biochemistry  
3 credit(s);  
Instructor: Chen, Chi  
Description: Please see NUTR5625

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 8312 Protein Metabolism
A-F only, 3 credit(s);
Instructor: DiCostanzo, Alfredo
Description: Student may contact the instructor or department for information.

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;
Instructor: Dayton, William R
Description: Student may contact the instructor or department for information.

Anthropology 395 HHHCtr

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

Anth 1001 Human Evolution
4 credit(s); Meets CLE req of Biological Sciences
Instructor: Tostevin, Gilbert B
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 1003V Understanding Cultures: Honors
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: Taussig,Karen-Sue
Description: Student may contact the instructor or department for information.
Style: 75% Lecture, 25% Discussion.
Exam Format: multiple choice; essay

Anth 1906W Freshman Seminar: Changing Human Adaptations
A-F only, 3 credit(s);Meets CLE req of Environment; meets CLE req of Writing Intensive
Instructor: Tappen,Martha
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: Monnier,Gilliane F
Description: Archaeology is the study of humans in the past. As such, it encompasses a very broad time span, from early humans in Africa several million years ago, to European settlers in North America 100 years ago. Geographically, it encompasses the entire planet, from the prehistoric Inuit of Alaska to the settlement of Polynesia. Conceptually, archaeology seeks to answer fundamental questions, such as ?When did humans first become dependent on fire??, ?What factors led to the development of agriculture?? or ?How can we explain the rise and fall of early civilizations?? The study of each of these big questions relies on answering many small questions that are asked in the context of excavations and other archaeological analyses. What underlies all of this diversity is a common theme: archaeology is the study of people in the past, and it differs from History in that it is based upon the study of material remains. The aim of this class is to provide an understanding of the methods and techniques used by archaeologists in investigating these questions. It includes not only hands-on learning of specific analytical techniques, such as faunal and lithic analysis, site survey and excavation strategy, but also focuses on the theoretical approaches that guide the questions we ask and the methods we apply to answer them. This class, therefore, prepares students for more advanced classes in the discipline. However, it also leads to a new way of thinking. This way of thinking is primarily critical and analytical. It leads the practitioner to think about how data is interpreted, and how theoretical frameworks as well as innate biases color these interpretations. Seeking solutions to interpretive problems requires the creative application of multidisciplinary approaches. Therefore the study of archaeology leads to a new way of thinking about and doing science.
Style: 40% Lecture, 50% Laboratory, 10% Guest Speakers.
Grading: 40% mid exam, 30% final exam. 30% Lab Grade
Exam Format: Multiple-choice, short answers, long answers.

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: Student may contact the instructor or department for information.

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: Altun,Murat
Description: Student may contact the instructor or department for information.

Anth 3005W Language, Culture, and Power
4 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Anth 3005W Language, Culture, and Power
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Valentine, David
Description: The "English Only" movement in the U.S. has been attempting for years to have English recognized as the nation's official language.... On a daily basis, people with non-standard accents are asked where they come from.... In New Guinea, languages which have thrived for centuries are dying out... People claim that they can "tell" if someone is gay or straight by the way they speak. While language is a universal feature of human culture, and a vital resource for humans' ability to describe and relate to the world around them, language is also deeply political in nature. Language, Culture, and Power aims to consider language as a social and political practice from an anthropological perspective which pays close attention to language in its contexts of use. The complex relationship between language, culture, and power raises important questions: how does language shape our view of the world? What relations of power are produced in language use and beliefs about language? How is language used creatively to produce social worlds? What are the politics of using one variety of language over another? What are the politics of writing, and how do debates about spoken language carry over to the written word? This course seeks to explore these and other questions from a variety of perspectives, including language and world view, the use of metaphors in everyday speech, language socialization, language shift, and language and identity. Students will be required to tape-record and transcribe a conversation to be used as the basis for sociolinguistic analysis through the semester. Above all, we will be concerned with the relationships of power that are deeply enmeshed in everyday language use, and consequently, the major themes of this class revolve around the politics of language and language ideologies.
Style: 60% Lecture, 10% Film/Video, 10% Discussion, 20% Laboratory.
Grading: 85% reports/papers, 10% class participation, 5% other evaluation. The "other evaluation" refers to your production of a transcription from a taped conversation
Exam Format: There are no in-class exams for this course.

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 3049W Anthropology of Social Class
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Lipset, David M
Description: Student may contact the instructor or department for information.

Anth 3205 Introduction to Aztec, Maya, and Inka Art, from Ancient Times to the Colonial Period
3 credit(s); Credit will not be granted if credit has been received for: ARTH 3205; Meets CLE req of Arts/Humanities
Instructor: Afanador-Pujol, Angelica J
Description: Student may contact the instructor or department for information.

Anth 3401 The Human Fossil Record
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 3601 Archaeology and Native Americans
3 credit(s); Credit will not be granted if credit has been received for: ANTH 5601; Meets CLE req of Diversity and Soc Justice US
Instructor: Hayes, Katherine F H
Description: American archaeologists and Native Americans have long had a difficult and conflicted relationship. Archaeology and anthropology, as disciplines, have their roots in colonial practices: establishing control through naming, defining, and categorizing Native cultures, framing them within the epistemology of Western scientific practice. To do so, however, archaeologists have, from a Native perspective, desecrated sacred grounds and robbed Native communities of their past. A Western scientific framework has often presumed objectivity and value-free construction of knowledge; but today we acknowledge that scientific practice is always undertaken within a social and political environment, that impacts the interpretations scientists make. Indigenous archaeology is an approach with increasing acceptance, which recognizes multiple historical epistemologies, and places the archaeologist’s voice as one among many in producing historical knowledge. How is history constructed differently through these frameworks? What is the impact for contemporary Native communities? And what is at stake if we reshape archaeological practice in this way? In this course we will consider examples of archaeological investigations which take Native American cultures as their objective focus; the foundations of a scientific epistemology and philosophy which underwrite that focus; the reaction and resistance of Native communities to this kind of archaeology, and the epistemological differences informing their positions; and examples of how archaeology might integrate both Native and scientific epistemological stances, for a more ethically equitable approach to the past. The course will consist of both lecture and open discussion of the cases. These are politically contentious issues, and the goal of this course is to (a) foster an open dialogue, and (b) introduce students to scholarly and literary resources which bring opposing viewpoints into conversation with one another.

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

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

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

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

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

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

Anth 3913 Senior Project Planning
A-F only, 1 credit(s);
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Anth 3913 Senior Project Planning
A-F only, 1 credit(s);
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.

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

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

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

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

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

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

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

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

Anth 3980 Topics in Anthropology: American Indians and Photography
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 4001 Advanced Method and Theory in Archaeology: Cultural Transmission and Archaeology
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Tostevin,Gilbert B
Description: Student may contact the instructor or department for information.

Anth 4003W Contemporary Perspectives in Cultural Anthropology
A-F only, 3 credit(s);Meets CLE req of Writing Intensive
Instructor: Raheja,Gloria Goodwin
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
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: 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: McKay, Ramah  
Description: Student may contact the instructor or department for information.

Anth 4035 Ethnographic Research Methods  
3 credit(s);  
Instructor: Ho, Karen  
Description: The practice of ethnography is central to anthropology as well as the social sciences more broadly. Ethnographic fieldwork, from participant observation to interviewing to mapping social relations, generates the data through which we learn about our social world. Ethnography is the ground on which anthropology stands, for anthropologists make broad theoretical claims about our universe through detailed ethnography. As such, this class will focus on the intellectual, methodological and political journey that ethnographers face in the new millennium. In the past several decades, anthropologists have raised serious questions and challenges to the very foundations of what constitutes ethnographic fieldwork. How have the processes of globalization, transnationalism, postcoloniality, and the rise of virtual "online" communities changed our notions of "the field" and the singular field site? What are the dialectics and complex negotiations of self and other given the challenges of "native" anthropologists and the discipline's heightened attention to inequality? How have anthropological ethics and reflexivity changed over time, and how have interdisciplinary engagements with critical theories of feminism, race, and power reframed the very questions we ask, and the way we address them? How have anthropologists innovated new ethnographic approaches that demonstrate the continued importance of the anthropological toolkit?  
Style: 30% Lecture, 40% Discussion. Ethnographic Field Project  
Grading: 50% reports/papers, 25% special projects, 10% in-class presentation, 15% class participation.

Anth 4047 Anthropology of American Culture  
3 credit(s); Meets CLE req of Social Sciences  
Instructor: Ho, Karen  
Description: This course will explore American cultures and values through an examination of race/ethnic, gender, and class relations, and cultural politics in the 21st century. We will focus on the transnational and heterogeneous histories and relationships among multiple communities such as African Americans, whites, Asian Americans, Latinos, and Native Americans. We will also focus on the workings and the changing cultural values of the U.S. by examining a variety of sites
and situations such as the workplace and the economy, immigration, family, the urban environment, poverty, multiculturalism, and globalization. We will explore a variety of American identities, communities, and institutions as pivotal sites to understand the dynamics of race/ethnicity, class, gender, and sexuality. This course is interdisciplinary, as it draws from anthropology, ethnic studies, American Studies, sociology, urban and global studies, history, and film. This course is intended for undergraduate majors as well as non-majors.

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

**Grading:** 25% mid exam, 35% final exam, 15% in-class presentation, 25% class participation.

**Anth 4049 Religion and Culture**
- **3 credit(s);**
- **Instructor:** Song, Hoon
- **Description:** This semester, the class' subtitle is 'sacredness.' The operational presupposition of the class is that sacredness is more than a mental phenomenon: it often involves objects and bodies. Modern perspectives on religion have long downplayed this 'material' aspect as they privileged iconoclastic spirituality. The anthropology of religion aims to go beyond the material/spiritual opposition; and asks how rituals employ objects and bodies in order to capture the effect we might call spiritual or mystical. Arguably, this may include political gestures such as protest suicides. Through select examples, this class explores how religious practices around the world and across time variously deployed this material/spiritual division as a resource rather than as a hierarchical opposition.

**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:** Dalinghaus, Ursula Monika
- **Description:** Student may contact the instructor or department for information.

**Anth 4077 Neanderthals: Biology and Culture of Humanity's Nearest Relative**
- **3 credit(s);**
- **Instructor:** Monnier, Gilliane F
- **Description:** Ever since the discovery of the first Neanderthal skull in Germany in 1856, debate has raged in science as in popular culture over the degree of humanity of Neanderthals, our closest prehistoric relatives. Were they shuffling, depraved cannibals, or intelligent and caring beings? Did they lack the qualities we define as uniquely human, such as language and the ability to produce art, or did they create the first symbolic objects, care for their wounded and their dead, and develop complex tool kits? In this course we will review the fossil, archaeological, and genetic evidence on the origins, adaptations, and ultimate fate of the Neanderthals. In addition, we will examine the shifting views on Neanderthals in relation to the changing intellectual and sociopolitical climate of the last 150 years. The course concludes by tackling the controversial and often emotional topic of whether Neanderthals died out due to environmental changes, or whether they were slaughtered into extinction by competing modern humans in what some have called the "Pleistocene Holocaust."
- **Style:** 20% Lecture, 40% Discussion, 30% Small Group Activities, 10% Student Presentation.
- **Grading:** 30% reports/papers, 40% reflection paper, 10% in-class presentation, 10% class participation, 10% other evaluation.

**Anth 4344 Europe and its Margins**
- **A-F only, 3 credit(s);** One course in ANTH or GLOS Credit will not be granted if credit has been received for: GLOS 4434;
- **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: Monnier, Gilliane F  
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  
Description: Student may contact the instructor or department for information.

Anth 4991 Independent Study
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 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 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
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Instructor: Taussig,Karen-Sue
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Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
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Anth 4992 Directed Readings
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Instructor: Wilson,Michael Lawrence
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Anth 4992 Directed Readings
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Instructor: Ho,Karen
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Instructor: Valentine,David
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Anth 4992 Directed Readings
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: McLean,Stuart J
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Anth 4992 Directed Readings
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Instructor: Song,Hoon
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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: 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
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Anth 4993 Directed Study
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Anth 4993 Directed Study
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Instructor: Monnier, Gilliane F
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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
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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: Demerath, Peter
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: 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
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: 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 5027W Archaeology of Prehistoric Europe
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 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 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 5442 Archaeology of the British Isles
A-F only, 3 credit(s); 
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 5601 Archaeology and Native Americans
3 credit(s); Credit will not be granted if credit has been received for: ANTH 3601; 
Instructor: Hayes, Katherine F H
Description: American archaeologists and Native Americans have long had a difficult and conflicted relationship. Archaeology and anthropology, as disciplines, have their roots in colonial practices: establishing control through naming, defining, and categorizing Native cultures, framing them within the epistemology of Western scientific practice. To do so, however, archaeologists have, from a Native perspective, desecrated sacred grounds and robbed Native communities of their past. A Western scientific framework has often presumed objectivity and value-free construction of knowledge; but today we acknowledge that scientific practice is always undertaken within a social and political environment, that impacts the interpretations scientists make. Indigenous archaeology is an approach with increasing acceptance, which recognizes multiple historical epistemologies, and places the archaeologist’s voice as one among many in producing historical knowledge. How is history constructed differently through these frameworks? What is the impact for contemporary Native communities? And what is at stake if we reshape archaeological practice in this way? In this course we will consider examples of archaeological investigations which take Native American cultures as their objective focus; the foundations of a scientific epistemology and philosophy which underwrite that focus; the reaction and resistance of Native communities to this kind of archaeology, and the epistemological differences informing their positions; and examples of how archaeology might integrate both Native and scientific epistemological stances, for a more ethically equitable approach to the past. The course will consist of both lecture and open discussion of the cases. These are politically contentious issues, and the goal of this course is to (a) foster an open dialogue, and (b) introduce students to scholarly and literary resources which bring opposing viewpoints into conversation with one another.

Anth 5802 Art of the Inka and their Ancestors
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5802; 
Instructor: Afanador-Pujol, Angelica J
Anth 8001 Ethnography, Theory, History
A-F only, 3 credit(s);
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 8111 Evolutionary Morphology
3 credit(s);
Instructor: McNulty, Kieran P
Description: Student may contact the instructor or department for information.

Anth 8230 Development and Management of Anthropological Research Projects
A-F only, 3 credit(s), max credits 6;
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 8510 Topics in Archaeology: Archaeology of the British Isles
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

Anth 8810 Topics in Sociocultural Anthropology: Language and Modernity
3 credit(s), max credits 9, 3 completions 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: Wells, Peter S
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: 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: Monnier,Gilliane F
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
Anth 8992 Directed Reading
1-18 credit(s), max credits 54, 3 completions 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 54, 3 completions allowed;
Instructor: Raheja, Gloria Goodwin
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 54, 3 completions allowed;
Instructor: Gudeman, Stephen Frederick
Description: Student may contact the instructor or department for information.

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1-18 credit(s), max credits 54, 3 completions allowed;
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Instructor: Monnier, Gilliane F
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Anth 8992 Directed Reading
1-18 credit(s), max credits 54, 3 completions allowed;
Instructor: Ho, Karen
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1-18 credit(s), max credits 54, 3 completions allowed;
Instructor: Valentine, David
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Anth 8992 Directed Reading
1-18 credit(s), max credits 54, 3 completions allowed;
Instructor: McLean, Stuart J
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 54, 3 completions allowed;
Instructor: Song, Hoon
Description: Student may contact the instructor or department for information.

Anth 8992 Directed Reading
1-18 credit(s), max credits 54, 3 completions allowed;
Instructor: Beeman, William O
Description: Student may contact the instructor or department for information.

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Instructor: Wells, Peter S
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1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: Lipset, David M
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: Langford, Jean M
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: Taussig, Karen-Sue
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: Tostevin, Gilbert B
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: Wilson, Michael Lawrence
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: Monnier, Gilliane F
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: Ho, Karen
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: Valentine, David
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: McLean, Stuart J
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: Song, Hoon
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: Beeman, William O
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: 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 8993 Directed Study
1-18 credit(s), max credits 18, 3 completions allowed;
Instructor: McKay, Ramah
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
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: Monnier, Gilliane F
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: Ho, Karen
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: Valentine, David
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: McLean, Stuart J
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: Song, Hoon
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: Beeman, William O
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: 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
Description: Student may contact the instructor or department for information.

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: Jekal,Mee
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: Gordon,Linsey A
Description: Student may contact the instructor or department for information.

ADes 3217 Fashion: Trends and Communication
A-F only, 3 credit(s);
Instructor: DeLong,Marilyn R
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 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Dunne,Lucy Elizabeth
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, instr consent credit will not be granted if credit already received for: DHA 4196;
Instructor: STAFF
Description:

ADes 4218W Fashion, Design, and the Global Industry
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive
Instructor: Wu, Juanjuan
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: Student may contact the instructor or department for information.

Apparel Studies 240 McNeal Hall

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: 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: 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
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.

ApSt 8271 Retailing: Strategic Perspectives
A-F only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: The purpose of this course is to provide exposure to a number of selected topics in the field of retailing. Students will also have the opportunity to extend their thinking regarding consumer behavior to strategic retail management. A parallel objective interwoven throughout the course is that students will be provided with the chance to participate in a number of professional career activities including literature integration, scholarly dialogue, and seminar leadership. Students will be encouraged to begin to incorporate relevant areas of retailing into their own research interests. Also, this course overviews the application of structural equation modeling (SEM) to various analysis problems confronted throughout the retail and consumer sciences. Topics will include confirmatory factor analysis, measurement and structural models, path analysis, mediation, and multiple group SEM analysis.

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. Please click below to view the course syllabus.
Style: 100% Web based
Grading: See attached syllabus
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: Online  
Grading: 10% class participation. See attached syllabus

ABus 4012 Strategic Decision Making and Problem Solving  
A-F only, 3 credit(s);  
Instructor: McNamara, Dan Eric  
Description: This fully online section is offered through Online and Distance Learning, College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. 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.  
Style: Online  
Grading: See attached syllabus

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 Continuing Education. Visit "Class URL" for ODL policies, 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 (self-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: See attached syllabus

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: See attached syllabus

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: See attached syllabus

ABus 4043 Project Management in Practice  
A-F only, 3 credit(s);
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: 1 Organizational structure types; 2 Leadership, team, and organization techniques; 3 Organizational culture.

**Style:** Online

**Grading:** 10% class participation. See attached syllabus

### 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.

**Style:** 100% Web Based.

**Grading:** See attached syllabus

### ABus 4104 Management and Human Resource Practices
A-F only, 3 credit(s);
Instructor: Benraouane, Sid Ahmed

Description: This is a fully online course offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. 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.

**Style:** 100% Web based

**Grading:** See attached syllabus

### ABus 4151 Innovation for Leaders and Organizations
A-F only, 3 credit(s);
Instructor: Flanders, Gordon R

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. 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.

**Style:** 100% Web based

**Grading:** See attached syllabus

### 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:** 100% Web based
ABus 4571 Introduction to Grant Writing for Health Care and Nonprofit Organizations
A-F only, 3 credit(s);
Instructor: Bahar, Keri L
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. This course will provide you with the tools needed to research and write grants in today's funding and political climate. Today, decreasing government funding at the local, regional, state, and federal levels, along with decreasing traditional educational and other social service funding has resulted in an increased need for nonprofit groups to find new or additional financial support. At the same time, government and nonprofit foundations are significantly increasing support for targeted health care research funding. Students will learn the basics of grant writing, including how to identify potential funding sources, and respond to a Request for Proposal by creating a needs assessment, goal statement, budget, and grant funding plans.
Style: 100% Web based
Grading: See attached syllabus

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

ABus 4993 Directed Study
1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Specially arranged projects, trips, or field work. Primarily for BAS students in the Applied Business program or other BAS majors. Non-BAS students must have academic adviser approval and meet course prerequisites. [See BAS Web site at www.cce.umn.edu/bas for additional course 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 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 "Ordinary Business of Live" - Issues in Business, Government, and Macroeconomics 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. 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 read and solve The Fatal Equilibrium, a mystery novel that highlights several basic economic principles. We will also investigate the field of business ethics through a series of readings and films. Given the instructor?s experience in student development 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. Instructor Gary M. Cooper is the Undergraduate Program Coordinator and Academic Advisor in the Department of Applied Economics and the College of Food, Agricultural and Natural Resource Sciences. He has received university teaching and academic advising awards for his work with students and faculty.  
Style: 50% Lecture, 50% Discussion  
Grading: 55% special projects, 30% quizzes, 15% class participation  
Exam Format: Multiple choice, short answer and mini essay

ApEc 3001 Applied Microeconomics: Consumers, Producers, and Markets  
4 credit(s); [ECON 1101 or ECON 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: Temple, Judy  
Description: Student may contact the instructor or department for information

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, 10% Discussion, 40% Laboratory  
Grading: 40% mid exam, 20% final exam, 40% other evaluation. labs and problem set assignments  
Exam Format: Problems, short answer, short essay, multiple choice, true/false

ApEc 3006 Applied Macroeconomics: Government and the Economy  
3 credit(s); [ECON 1102, ECON 3102] 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: 80% Lecture, 20% Discussion.
Grading: 35% final exam, 30% reports/papers, 35% 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: 80% Lecture, 20% Discussion.
Grading: 35% final exam, 30% reports/papers, 35% 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 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: Usset, Edward Charles

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 3411 Commodity Marketing
**ApEc 3501 Agribusiness Finance**
3 credit(s);
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 grad
Credit 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.

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**ApEc 4451W Food Marketing Economics**

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: 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

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**ApEc 4461 Horticultural Marketing**

A-F only, 3 credit(s); 1101 or ECON 1101 Credit will not be granted if credit has been received for: HORT 4461;

**Instructor:** Yue, Chengyan

**Description:** This course examines several major areas in horticultural marketing. First, we will introduce the difference between horticultural products and commercial commodities and what's special about horticultural marketing; Second, we analyze the functions performed by the horticultural marketing system. We analyze the marketing behavior of horticultural businesses (farms, wholesalers, garden centers) and cover the core marketing components that should be used by every small horticultural business; Finally, the basic approaches of consumer research (survey techniques, and non-hypothetical experimental approaches, etc.) will be introduced. The recommended textbook is Solomon, Michael R. and Elnora Stuart. 2003. Marketing: Real People, Real Choices, 3rd Ed. This course will consist of lectures, discussions, and student projects and presentations. Students will work on the projects in small group teams of three or four. The target audience is undergraduate students and master of agriculture students.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 30% mid exam, 20% final exam, 15% reports/papers, 10% quizzes, 20% in-class presentation, 5% class participation.

**Exam Format:** Multiple choice and short answer questions.

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**ApEc 5031 Methods of Economic Data Analysis**

3 credit(s);

**Instructor:** Beatty, Timothy KM

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

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**ApEc 5151 Applied Microeconomics: Firm and Household**

3 credit(s);

**Instructor:** Coggins, Jay S

**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

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**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 5721 Economics of Science and Technology Policy
3 credit(s);
Instructor: Pardey, Philip Gordon
Description: Student may contact the instructor or department for information.

ApEc 5751 Global Trade and Policy
3 credit(s);
Instructor: Smith, Pamela Jane
Description: Topics: This course examines global trade and policy. Questions examined include: (1) What determines country exports and imports? (2) Who gains and who loses from trade, within countries and globally? (3) How do trade policies affect welfare, within countries and globally? (4) How do exchange rates affect trade? and (5) What trade and policy issues are currently being negotiated? Methods: Students will learn how to apply economic theories of trade and policy to answer the questions above. Text: Krugman, Paul and Maurice Obstfeld, "International Economics: Theory and Practice." New York: Harper Collins. Level: This course is designed for graduate students and advanced undergraduates.
Style: 50% Lecture, 50% Discussion.
Grading: 40% mid exam, 20% final exam, 20% in-class presentation, 20% other evaluation. class participation
Exam Format: Problem solving and short essay.

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, indepedent 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
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: Hurley, Terry
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 8341 Applied Public Finance
A-F only, 3 credit(s);
Instructor: Kalambokidis, Laura TJ
Description: Student may contact the instructor or department for information.

ApEc 8401 Consumer Behavior and Household Economics
A-F only, 2 credit(s);
Instructor: Glewwe, Paul W
Description: Student may contact the instructor or department for information.

ApEc 8402 Information and Behavioral Economics
A-F only, 2 credit(s);
Instructor: Yue, Chengyan
Description: Student may contact the instructor or department for information.

ApEc 8701 International Economic Development, Growth, and Trade
3 credit(s);
Instructor: Roe, Terry Lee
Description: Student may contact the instructor or department for information.

ApEc 8801 Applied Production Theory
A-F only, 3 credit(s);
Instructor: Smith, Rodney B
Description: Student may contact the instructor or department for information.
ApEc 8804 Managerial Economics
3 credit(s);
Instructor: Boland, Michael Aloysius
Description: The objective of this course is to integrate management principles with economics and provide applications to these principles. The course is similar to what you would find in a Harvard Business School course for their PhD in managerial economics. At the conclusion of the class students are expected to be able to: ? Understand relationships between economic and accounting concepts; ? Conduct an industry analysis; ? Understand modern institutional theories of the firm; ? Apply concepts of firm boundaries to agriculture; and ? Understand principles of economic geography
Style: 25% Lecture, 25% Small Group Activities, 25% Student Presentation.

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

ApEc 8903 PhD Qualifying Paper Seminar I
S-N only, 1 credit(s);
Instructor: Beatty, Timothy KM
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: Mc Cullough, Gerard John
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 8001 Introduction to Research in the Biological Sciences
S-N only, 1 credit(s);
Instructor: Wallace, Robert
Description: Student may contact the instructor or department for information.

APS 8002 Final Project Course for Plan B MBS Students
S-N only, 2 credit(s);
Instructor: Schottel, Janet L
Description: Student may contact the instructor or department for information.

APS 8003 Capstone Course for Plan C MBS Students
S-N only, 2 credit(s);
Instructor: Fruen, Brad
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
5 credit(s); Credit will not be granted if credit has been received for: ARAB 4101;
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.

Arab 1101 Beginning Arabic
5 credit(s); Credit will not be granted if credit has been received for: ARAB 4101;
Instructor: Ben Zahra, Saloua
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 blanks. Reading comprehension and listening comprehension.

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

Arab 3101 Intermediate Arabic
5 credit(s); 1102 or instr consent Credit will not be granted if credit has been received for: ARAB 4121;
Instructor: Ben Zahra, Saloua
Description: Arabic 3101 is designed to 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 authentic text material. Writing is emphasized especially through writing compositions and homework assignments. Listening exercises and drills are utilized in class by listening to web-based recordings and in the language lab by practicing interactive Arabic drills. 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: 25% Lecture, 5% Film/Video, 30% Discussion, 10% Laboratory, 20% Small Group Activities, 10% Student Presentation.

Grading: 25% mid exam, 25% final exam, 15% reports/papers, 15% written homework, 10% in-class presentation, 10% class participation.

Exam Format: Multiple choice, fill in the blanks, inference from reading short articles and listening to Arabic excerpts.
Grading: 25% mid exam, 25% final exam, 15% reports/papers, 15% written homework, 10% in-class presentation, 10% class participation.

Exam Format: Multiple choice, fill in the blanks, inference from reading short articles and listening to Arabic excerpts.

Arab 4121 Intermediate Arabic

3 credit(s);[4102 or equiv], grad student
Credit will not be granted if credit has been received for: ARAB 3101;
Instructor: Mohammed, Sidow Abdishariff
Description: Arabic 3101 is designed to 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 authentic text material. Writing is emphasized especially through writing compositions and homework assignments. Listening exercises and drills are utilized in class by listening to web-based recordings and in the language lab by practicing interactive Arabic drills. 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: 25% Lecture, 5% Film/Video, 30% Discussion, 10% Laboratory, 20% Small Group Activities, 10% Student Presentation.
Grading: 25% mid exam, 25% final exam, 15% reports/papers, 15% written homework, 10% in-class presentation, 10% class participation.
Exam Format: Multiple choice, fill in the blanks, inference from reading short articles and listening to Arabic excerpts.

Arab 5101 Advanced Arabic

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

Arch 1281 Design Fundamentals I

A-F only, 4 credit(s); Meets CLE req of Arts/Humanities
Instructor: Swackhamer, Marc T
Description: Student may contact the instructor or department for information.

Arch 2301 Introduction to Drawing in Architecture

A-F only, 4 credit(s); pre-arch major or BDA major; no prereq in summer credit will not be granted if credit received for: Arch 1301 Credit will not be granted if credit has been received for: LA 5301;
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: Intro to Virtual Reality

2 credit(s), max credits 24, 4 completions allowed;
Instructor: Anderson, Lee Bruce
Description: Student may contact the instructor or department for information.

Arch 3150 Topics in Architecture: Architecture and Film
3 credit(s), max credits 24, 4 completions allowed;
Instructor: Westbrook, Thomas Robert
Description: Student may contact the instructor or department for information.

Arch 3150 Topics in Architecture: Intro to BIM and Revit
2 credit(s), max credits 24, 4 completions allowed;
Instructor: Delwiche, Benjamin Lee
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Little Free Library-stage 1
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: MN Made: Past, Present, Future
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Builders of the Universe
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Digital Ceramics
A-F only, 4 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Little Free Library-Stage 2
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Creating a 21st Century Community
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Choreography of the Super Normal
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Architecture Reconsidered as a Global Citizen
Arch 3250 Design Workshop: Analytical Modeling of Contemporary Architecture
A-F only, 3 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Ornament in Architecture
A-F only, 3 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Saving Modernism
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Roe, Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Architecture Reconsidered as a Global Citizen
A-F only, 4 credit(s), max credits 18, 9 completions allowed;
Instructor: Heshmati, Ali Reza
Description: Student may contact the instructor or department for information.

Arch 3250 Design Workshop: Digital Ceramics
A-F only, 4 credit(s), max credits 18, 9 completions allowed;
Instructor: Reichert, Molly Elizabeth
Description: Student may contact the instructor or department for information.

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 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 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: Student may contact the instructor or department for information.

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.
Arch 3711V Honors: Environmental Design and the Sociocultural Context
A-F only, 3 credit(s); Honors, [soph or above] Credit will not be granted if credit has been received for: ARCH 3711W; Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences; 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); Soph or above Credit will not be granted if credit has been received for: ARCH 3711V; Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences; 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: Writing for Self, Writing for Others
A-F only, 3 credit(s), max credits 24, 6 completions allowed;
Instructor: Lindt, Gayla Jean
Description: This topics in architecture course explores how visual thinkers can embrace words to develop a self-awareness about their work. Writing about your work with others in mind can help you understand your project ideas more fully and with more insight, which in turn can help you chart a course and navigate your professional endeavors. This course will help you communicate the ideas in your growing body of design work in a broader context, beyond the walls of Rapson Hall. The course focuses on questions such as: What can I learn from studying how architects publish ideas? What is my professional narrative? How do I talk about my work in a broader context, beyond the course assignment? How can I leverage design thinking to craft a meaningful story for my portfolio?

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

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

Arch 4150 Topics in Architecture
A-F only, 3 credit(s), max credits 24, 6 completions allowed;
Instructor: Solomonson, Katherine Mary
Description: How were the buildings that form today’s neighborhoods, commercial districts, public spaces, and industrial areas shaped in the past? How does this relate to how we live now and the design and planning choices we make for the future? This course, a history of architecture in the United States, will explore some of the most pervasive styles, building types, and landscapes produced from the 17th century to the recent past. Each major topic will begin with the analysis of a structure or site (recent or inherited from the past) to raise broader historical questions about factors, processes, and design perspectives that have contributed to its form and current use. Here are a few of the questions we will consider:
- Why do 21st-century houses still resemble those constructed in the 19th century?
- How do current definitions of sustainability inform questions about buildings constructed in the past?
- How were (un)sustainable practices established, abandoned, or transformed?
- How have travel and transit changed, or not, and how do abandoned systems continue to affect contemporary environments and new concepts?
- Why have cities long turned to outside “starchitects” for the design of buildings for major cultural institutions?
- How have advertising and consumer culture informed the design of both commercial and non-commercial spaces?

Through lectures, discussion, readings, and research, we will analyze buildings and spaces—architect designed and “vernacular”—in the context of social, political, economic, technological, and ecological change. As we address these issues, we will examine the ways design and daily life, performed locally, interacted with national and global systems and flows; and the role the built environment has played in advancing structures and concepts of class, gender, race, ethnicity, and power. Students will gain a broad familiarity with the history of American buildings and landscapes, develop critical frameworks for analysis, and enhance their understanding of the environments they interact with every day as designers, citizens, consumers, and professionals.

Arch 4150 Topics in Architecture: Designing Practice
A-F only, 3 credit(s), max credits 24, 6 completions allowed;
Instructor: Lazor, Charles Lawrence
Description: Student may contact the instructor or department for information.

Arch 4194H Thesis/Capstone Project
A-F only, 2 credit(s), max credits 4;
Instructor: Lindt, Gayla Jean
Description: Student may contact the instructor or department for information.

Arch 4283 Undergraduate Architecture Studio III
A-F only, 6 credit(s);
Instructor: Ganser, Robert Jon
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 4434 Contemporary Architecture
A-F only, 3 credit(s); 3412 or instr consent Credit will not be granted if credit has been received for: ARCH 5434;
Instructor: Tozer, William Richard Eric
Description: Student may contact the instructor or department for information.

Arch 4511 Materials and Methods I
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: The course is designed to introduce students to the professional practice and scholarship of historic preservation with specific emphasis on secondary research of preservation topics and critical analysis of preservation issues. Material is presented through illustrated lectures, guest lecturers, field trips, and class discussion. Topics covered include preservation theories, terminology and concepts; descriptive analysis of historic buildings and assessment of architectural integrity; the government’s role in historic preservation, including federal, state, and local preservation laws and ordinances; historic landscapes; preservation standards and guidelines; preservation advocacy; preservation economics; and future or emerging issues for historic preservation.

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. Instructors Meghan Elliott: http://arch.design.umn.edu/directory/elliottm/elliottm.html Todd Grover: http://arch.design.umn.edu/directory/grovert/grovert.html

Arch 4674 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 4701W Introduction to Urban Form and Theory
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Conway, William F
Description: Student may contact the instructor or department for information.

Arch 4731 Territorial City
A-F only, 3 credit(s);
Instructor: Conway, William F
Description: Student may contact the instructor or department for information.

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 5350 Graduate Architectural Design V
A-F only, 3 credit(s);
Instructor: Guzowski, Mary M
Description: Student may contact the instructor or department for information.
Arch 5350 Graduate Architectural Design V
A-F only, 3 credit(s);
Instructor: Saloojee, Ozayr
Description: Student may contact the instructor or department for information.

Arch 5410 Topics in Architectural History
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Solomonson, Katherine Mary
Description: How were the buildings that form today’s neighborhoods, commercial districts, public spaces, and industrial areas shaped in the past? How does this relate to how we live now and the design and planning choices we make for the future? This course, a history of architecture in the United States, will explore some of the most pervasive styles, building types, and landscapes produced from the 17th century to the recent past. Each major topic will begin with the analysis of a structure or site (recent or inherited from the past) to raise broader historical questions about factors, processes, and design perspectives that have contributed to its form and current use. Here are a few of the questions we will consider: - Why do 21st-century houses still resemble those constructed in the 19th century? - How do current definitions of sustainability inform questions about buildings constructed in the past? How were (un)sustainable practices established, abandoned, or transformed? - How have travel and transit changed, or not, and how do abandoned systems continue to affect contemporary environments and new concepts? - Why have cities long turned to outside “starchitects” for the design of buildings for major cultural institutions? - How have advertising and consumer culture informed the design of both commercial and non-commercial spaces? Through lectures, discussion, readings, and research, we will analyze buildings and spaces? architect designed and ?vernacular? in the context of social, political, economic, technological, and ecological change. As we address these issues, we will examine the ways design and daily life, performed locally, interacted with national and global systems and flows; and the role the built environment has played in advancing structures and concepts of class, gender, race, ethnicity, and power. Students will gain a broad familiarity with the history of American buildings and landscapes, develop critical frameworks for analysis, and enhance their understanding of the environments they interact with every day as designers, citizens, consumers, and professionals.

Arch 5411 Principles of Design Theory
A-F only, 3 credit(s);
Instructor: Comazzi, John Joseph
Description: Student may contact the instructor or department for information.

Arch 5434 Contemporary 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 4434;
Instructor: Tozer, William Richard Eric
Description: Student may contact the instructor or department for information.

Arch 5450 Topics in Architectural Theory
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Fisher, Thomas Ray
Description: Student may contact the instructor or department for information.

Arch 5450 Topics in Architectural Theory
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Lavine, Lance A
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 5550 Topics in Technology: Carbon Neutral: Towards Net Zero at Community Scal
A-F only, 3 credit(s), max credits 12, 3 completions allowed;
Instructor: Carter, Richard Allan
Description: Student may contact the instructor or department for information.

Arch 5550 Topics in Technology: Design for Sustainable Development
A-F only, 3 credit(s), max credits 12, 3 completions allowed;
Instructor: Rose, Fred Anthony
Arch 5561 Tech 1, Structures for Building  
A-F only, 2 credit(s);  
Instructor: Strothman, Susan C  
Description: Student may contact the instructor or department for information.

Arch 5562 Tech 2, Intro to Building Technology  
A-F only, 2 credit(s);  
Instructor: Roe, Sharon Louise  
Description: Student may contact the instructor or department for information.

Arch 5609 Development and Implementation of Research  
A-F only, 3 credit(s);  
Instructor: Donofrio, Gregory  
Description: This course provides a forum for students to independently develop research topics and implement research methods related to architectural scholarship and practice, aided by classmates, instructor, and guest lecturers. It is intended for students undertaking substantial research assignments including, but not limited to, Plan A thesis, Plan B paper, Plan C project (capstone), or Research Practices Internship in the Master of Science Research Practices concentration (MS-RP). Coursework will emphasize: formation and scoping of research questions; methods and theories in the context of systematic knowledge inquiry; sources, uses, and documentation of information and data; review of related literature and precedents; reciprocal relationships among research, writing, design, practice; and formatting and dissemination of research findings. Students will learn strategies to effectively address unfamiliar, unforeseen, or ambiguous circumstances and contexts that may stretch the scope of existing pedagogy, but that are an emerging aspect of innovative architecture practices engaging increasingly complex projects. Faculty Profile: http://arch.design.umn.edu/directory/donofrio/

Arch 5621 Professional Practice in Architecture  
A-F only, 3 credit(s);  
Instructor: Cheng, Renee  
Description: Student may contact the instructor or department for information.

Arch 5671 Historic Preservation  
3 credit(s);  
Instructor: Donofrio, Gregory  
Description: The course is designed to introduce students to the professional practice and scholarship of historic preservation with specific emphasis on secondary research of preservation topics and critical analysis of preservation issues. Material is presented through illustrated lectures, guest lecturers, field trips, and class discussion. Topics covered include preservation theories, terminology and concepts; descriptive analysis of historic buildings and assessment of architectural integrity; the government's role in historic preservation, including federal, state, and local preservation laws and ordinances; historic landscapes; preservation standards and guidelines; preservation advocacy; preservation economics; and future or emerging issues for historic preservation.

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. Instructors Meghan Elliott: http://arch.design.umn.edu/directory/elliottm/elliottm.html Todd Grover: http://arch.design.umn.edu/directory/grovert/grovert.html

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 5993 Directed Study
A-F only, 1-4 credit(s), max credits 8;
Instructor: Strothman, Susan C
Description: Student may contact the instructor or department for information.

Arch 5993 Directed Study
A-F only, 1-4 credit(s), max credits 8;
Instructor: Cheng, Renee
Description: Student may contact the instructor or department for information.

Arch 5993 Directed Study
A-F only, 1-4 credit(s), max credits 8;
Instructor: Lutz, Jim
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: Yoos, Jennifer A
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: Guzowski, Mary M
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: Student may contact the instructor or department for information.

Art
Regis Center for Art

ArtS 1001 Introduction to Contemporary Art and Theory
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
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 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 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: ArtS 1601 Experimental and Media Arts, is an introduction to new forms and practices in media arts with a focus on sound and video. As a studio arts course students will produce three to five short projects that allow them to build technical, aesthetic and critical skills in the field. New Media concepts are presented through readings, screenings and discussion and include; remediation and remixing of images and sounds culled from a variety of cultural sources, artistic interventions into urban spaces, recent developments in internet art practices and conceptually based media art work. Presentation, critique and discussion of student projects are the primary means by which students develop greater insight into and critical analysis of artistic processes and cultural interpretations of new media art practices. Short writing assignments in response to reading and viewing assignments are included. Students are evaluated on assigned art projects, participation in critiques and discussions and short writing assignments
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 1703 Digital Photography**
4 credit(s); Credit will not be granted if credit already received for: ArtS 1702/ArtS 2702 Credit will not be granted if credit has been received for: ARTS 2703; 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
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 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: Daily Life Matters: Art and Pop Culture
A-F only, 3 credit(s);
Instructor: Rose, Thomas Albert
Description: Student may contact the instructor or department for information.

ArtS 1905 Freshman Seminar: The Art of Collaboration
A-F only, 3 credit(s);
Instructor: Sommers, Michael J
Description: Student may contact the instructor or department for information.

ArtS 1905 Freshman Seminar: Creative CityMaking Comes to Campus
A-F only, 3 credit(s);
Instructor: Willow, Diane
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 2102 Painting
A-F only, 4 credit(s); ARTS 1101 or 2101, intended or declared art major Credit will not be granted if credit has been received for: ARTS 1102;
Instructor: Zefeldt, Mathew James
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: Larson, Chris
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: 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. Materials for this class can be $150. Class Time: 25% Lecture, 25% Discussion, 50% Laboratory. Work Load: 1 exams. students will be need to attend.
approximately 4 hours of open lab sessions in order to complete their work. Grade: 15% mid exam, 30% final exam, 20% in-class presentation, 25% laboratory evaluation, 10% problem solving. Exam Format: performance Instructor: STAFF

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: Tornatore, Natalie Anne
Description: Student may contact the instructor or department for information.

ArtS 3101 Intermediate Drawing
4 credit(s);
Instructor: Kuhr, Alexis
Description: This course provides an intensive advanced drawing experience. Students develop their practice through individual thematic exploration in varied drawing media. Meetings include in-class work, critiques, and lectures on issues in contemporary drawing. Students are encouraged to maintain a digital sketchbook, adding drawings and notes over the course of the semester. iPads are available to students in this course through Department checkout. In the final weeks of the semester, students will mount an exhibition of work produced in class.

ArtS 3101 Intermediate Drawing
4 credit(s);
Instructor: Peterson, Lamar
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 3102 Intermediate Painting
4 credit(s);
Instructor: Peterson, Lamar
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: Student may contact the instructor or department for information.

ArtS 3303 Sculpture: Metalcasting
4 credit(s);
Instructor: STAFF
Description: Make cast metal sculpture in the new state-of-the-art University of Minnesota Sculpture Foundry in the new Regis Center for Art. Metalcasting of Sculpture is an intensive course where you will be asked to think creatively with cast aluminum, bronze, and iron. Prerequisites: ArtS 1301 Basic Sculpture and ArtS 1101W Concepts in Visual Arts. Required Text: "Hot Metal--A Complete Guide to the Metalcasting of Sculpture," Potratz. Available at bookstore or on reserve in Wilson Library. Slide lectures, demonstrations, critiques, discussion, and studio work. Course fee covers most materials, but you may need to spend more depending on the size of your sculpture. Safety equipment required. Three assignments resulting in three cast metal sculptures, quiz on text, 2-3 page paper, visiting artists, mid-term and final critiques. Sand molding, ceramic shell molding, and other molding processes used to make creative work. Required lab for Fall evening course. Spring course requires participation in the Annual Minnesota Iron Pour. Expect to spend at least 6 hours per week outside of class working on your sculpture.
Style: 5% Lecture, 10% Discussion. Demonstrations, critique, studio work in the foundry
Grading: 20% reports/papers, 10% quizzes, 60% other evaluation. Creative work in Cast Metal
Exam Format: Individual and group critique

ArtS 3390 Sculpture Methods and Practice: Installation and Public Sculpture
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Stanislav, Andrea Christine
Description: Student may contact the instructor or department for information.

ArtS 3401W Critical Theories and Their Construction From a Studio Perspective
**Instructor:** Schmid, Christina Heidi  
**Description:** This course aims to involve students in critical ideas and theories relevant to the practice of contemporary art. The class begins with essays that analyze the significance of aesthetic experience. Why do we look at and make art? What makes the encounter with materials, ideas, and representations worthwhile? Understanding the aesthetic experience as a disturbance, the course investigates three sites of such disturbances. In "No More Heroes: The Aesthetics of Failure," we examine artists' recent fascination with deviating from conventional narratives of success and accomplishment. Instead, they embrace futility, "pirate practice," and "bumbling" as their preferred modus operandi. The second site of aesthetic disturbance the class examines revolves around the much-contested boundary between the human and the animal. This precarious divide is addressed in the section "From Bambi to Sponge Bob: Animals in Art." Finally, the last section of Critical Theories, "Falling into Place," questions the way we experience, represent, and make sense of place and landscape. The course includes presentations and discussions on contemporary art and theory, writing workshops and instruction, and classroom visits by artists whose work pertains to the subjects discussed. As a writing intensive course, ArtS3401W: Critical Theories emphasizes writing as a multi-purpose tool for making sense of and with art.

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

**ArtS 3510 Intermediate Printmaking: Traditional and Contemporary Approaches**  
4 credit(s), max credits 8;  
**Instructor:** Satinover, Nicholas Henri  
**Description:** Student may contact the instructor or department for information.

**ArtS 3604 Animation**  
4 credit(s);  
**Instructor:** Paul, Steve  
**Description:** 2D Emphasis The 2D class focuses on creating compelling animation by investigating the techniques, history, theory and style of a broad spectrum of animation. The fall session focuses on character animation and the spring session investigates motion graphics and abstract animation. The two sessions are independent of each other in 3604 but can be built on in 5640. Both sessions begin with approximately six weeks of skill building projects and the remaining time devoted to student-initiated large final projects. The class covers both analog and digital creation methods, with Adobe Photoshop and After Effects being the primary software packages. Students are open to use their choice of medium for creating animations. 3D Emphasis The 3D class focuses on creating art and animation within Autodesk Maya. Students spend the first six weeks in developing basic skills with the software, then dedicate the remaining weeks to a large final project of their choice. Topics covered include modeling, materials and lighting, animation and basic special effects. The course is suitable for those with beginning to advanced experience in 3D. For greatest success in the class students should have a Mac or PC and a (free) stand-alone student license for Autodesk Maya, available here: [http://students.autodesk.com/?nd=download_center](http://students.autodesk.com/?nd=download_center)
ArtS 3605 Sound Art  
4 credit(s);  
Instructor: Willow, Diane  
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 centered on the use of FILM cameras. Along with mastering the components of traditional film exposure and dark-room craft the student will learn to use a large format camera and experiment with non-traditional cameras as well. There will be an emphasis on the expressive print, the history of the photographic medium, and assignments which cover the spectrum of classical photographic practice.  
Style: 15% Lecture, 10% Film/Video, 15% Discussion, 30% Laboratory, 15% Student Presentation, 15% Demonstration.  
Grading: 40% final exam, 60% special projects. Grades are determined on the basis of assignments and a final project  
Exam Format: review in 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 3703 Photography: Digital Imaging  
4 credit(s);  
Instructor: FULLERTON, TERRI LEE  
Description: Student may contact the instructor or department for information.

ArtS 3801 Ceramics: Wheel Throwing  
4 credit(s), max credits 8;  
Instructor: Metcalfe, Anna Verlo  
Description: Student may contact the instructor or department for information.

ArtS 3802 Ceramics: Handbuilding  
4 credit(s), max credits 8;  
Instructor: Tornatore, Natalie Anne  
Description: Student may contact the instructor or department for information.

ArtS 5107 Advanced Drawing Using Digital Media  
4 credit(s);  
Instructor: Katsiaficas, Diane  
Description: Student may contact the instructor or department for information.

ArtS 5110 Advanced Drawing  
4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Zefeldt, Mathew James  
Description: Student may contact the instructor or department for information.

ArtS 5120 Advanced Painting  
4 credit(s), max credits 16, 4 completions allowed;  
Instructor: Morgan, Clarence E.  
Description: Student may contact the instructor or department for information.

ArtS 5330 Advanced Sculpture: Metal Casting  
4 credit(s), max credits 12, 3 completions allowed;  
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;  
Instructor: Stanislav, Andrea Christine
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 5441 Professional Practices
A-F only, 3 credit(s);
Instructor: Baeumler, Christine Arle
Description: This seminar is intended to provide a context for developing a career as an artist and explore how to create a sustainable artistic practice. Through visiting artist presentations, as well as those by professionals in arts administration, non-profits, established and non-traditional galleries, curators, critics, and recent art graduates, we will examine the rich ecology of the arts in the Twin Cities community. We will also explore how to navigate the arts terrain successfully as an artist. We will also examine and discuss contemporary art issues and artists through attending the visiting artists to the Department of Art as part of the Visiting Artist and Critic Program. Additionally, we will explore theoretical and practical aspects of being an artist today. We will discuss topics, which will include motivation, influence, community, audience, MFA programs, and other possible avenues for careers in the arts. One of the objectives of this seminar is to develop and practice the use of coherent, constructive language for communication in the visual arts. We will be developing a professional toolkit in the form of an artist resume, bio, statement and elevator speech and information on creating an online presence. Some of the "big issues" to be considered are: What is an arts education? Why am I an artist? What motivates me? Who is my audience? How can I communicate with this audience? Or various audiences? What role does being an artist play in my own life? How can I sustain my practice beyond school? How to I take the next steps in my career or pursuit as an artist? How can I make a living as an artist? What are my options? What is my biggest vision as an artist and how do I make sure I continue past graduation?

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: MFA Teaching Colloquium
1 credit(s), max credits 12, 12 completions allowed;
Instructor: Lukkas, Lynn Tjernan
Description: Student may contact the instructor or department for information.

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

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

ArtS 5640 Advanced Animation
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Paul, Steve
Description: 2D Emphasis The 2D class focuses on creating compelling animation by investigating the techniques, history, theory and style of a broad spectrum of animation. The fall session focuses on character animation and the spring session investigates motion graphics and abstract animation. The two sessions are independent of each other in 3604 but can be built on in 5640. Both sessions begin with approximately six weeks of skill building projects and the remaining time devoted to student-initiated large final projects. The class covers both analog and digital creation methods, with Adobe Photoshop and After Effects being the primary software packages. Students are open to use their choice of medium for creating animations. 3D Emphasis The 3D class focuses on creating art and animation within Autodesk Maya. Students spend the first six weeks in developing basic skills with the software, then dedicate the remaining weeks to a large final project of their choice. Topics covered include modeling, materials and lighting, animation and basic special effects. The course is suitable for those with beginning to advanced experience in 3D. For greatest success in the class students should have a Mac or PC and a (free) stand-alone student license for Autodesk Maya, available here: http://students.autodesk.com/?nd=download_center
ArtS 5650 Advanced Sound Art
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Willow, Diane
Description: Student may contact the instructor or department for information.

ArtS 5710 Advanced Photography
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Estep, Jan
Description: Student may contact the instructor or department for information.

ArtS 5810 Advanced Ceramics
4 credit(s), max credits 16, 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, 12 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, 12 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, 12 completions allowed;
Instructor: Schmid, Christina Heidi
Description: Student may contact the instructor or department for information.

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 12 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, 12 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, 12 completions allowed;
Instructor: Morgan, Clarence E.
Description: Independent Study is reserved for special circumstances intended for students who have already displayed the capacity to work independently. Students must be self motivated, ambitious and have a clear indication of the direction their work is taking. The instructor requires students registered for an Independent Study must have worked with the instructor previously. Typically, the instructor in consultation with the student will meet between 5-6 times during the semester. These meetings are designed to offer students critical feedback about their work and to review the progress they are making.

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

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 12 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, 12 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, 12 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, 12 completions allowed;
Instructor: Kuhr, Alexis
Description:

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

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Stanislav, Andrea Christine
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.
Style: 50% Discussion, 50% Studio.
Grading: 50% mid exam, 50% final exam.
Exam Format: critique

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

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

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

ArtS 8300 Practice and Critique: Sculpture
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Larson, Chris
Description: Student may contact the instructor or department for information.
ArtS 8400 Theoretical Constructions in Contemporary Art
3 credit(s), max credits 6;
Instructor: Estep, Jan
Description: Student may contact the instructor or department for information.

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

ArtS 8600 Practice and Critique: Experimental and Media Arts
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Lukkas, Lynn Tjernan
Description: Student may contact the instructor or department for information.

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

ArtS 8800 Practice and Critique: Ceramics
A-F only, 3 credit(s), max credits 12, 4 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: 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: 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: 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: 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: 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 Christine
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: 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.
ArtH 1002W Why Art Matters
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Asher, Frederick M
Description: Art matters! From billboards and graffiti on the streets to paintings and sculpture in museums, visual imagery informs our understanding of the world. This course will not only question "what is art?" but will also introduce students to the diverse ways in which art has and continues to function in society. The course is not a chronological survey of the history of art and great artists. Instead, it is thematic, looking at art from a variety of cultural perspectives and approaches. Through lectures and discussions, the course will examine such diverse topics as public art, illicit art trafficking, art and gender, art as a means of protest, and how art can be used to establish authority. The course is introductory, and assumes you have had no prior exposure to art history. There will three quizzes during the semester plus a final exam; in addition, there will be brief writing, assignments (some creative, some analytical) that will address the topics discussed in class. Grading: 20% final exam, 40% reports/papers, 20% quizzes, 10% class participation, 10% other evaluation. timeline assignment

ArtH 1002W Why Art Matters
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Prater, Erika
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. Introduction to history of topics that investigate power/importance of art both globally and in its diverse forms, from architecture and painting to video and prints. Sacred space, propaganda, the museum, art/gender, art/authority, tourism.
Style: Online
Grading: See attached syllabus

ArtH 1002W Why Art Matters
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: DeLand, Lauren A
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 history of topics that investigate power/importance of art both globally and in its diverse forms, from architecture and painting to video and prints. Sacred space, propaganda, the museum, art/gender, art/authority, tourism.
Style: 100% Web Based.
Grading: 50% reports/papers, 15% special projects, 20% quizzes. -14 online discussions (15%)

ArtH 1004W Introduction to Asian Art
3 credit(s); Credit will not be granted if credit has been received for: ARTH 1004V; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Kim, Minku
Description: The survey aims to introduce the art and material culture of pre-20th century Asia with the exception of the Middle East. Select artistic traditions in South, Southeast, and East Asia are considered against their religious, socio-political, and other cultural contexts. Major themes include (1) the rise of civilizations, (2) the local, indigenous development of art forms, (3) the spread of Buddhism across the region, and (4) trans-regional and cross-cultural relations. Designed as a Writing Intensive (WI) curricular, students are to complete a writing project integrated with their fieldwork at the Minneapolis Institute of Arts.
Style: 100% Lecture. One-time fieldwork to the Minneapolis Institute of Arts (MIA) on extra hour
Grading: 15% mid exam, 15% final exam, 40% reports/papers, 30% attendance. Each absence to class meeting will mark down 1% off overall grade.
Exam Format: Slide identification plus short essay writing (Review questions will be prompted in advance, at least, two weeks before the exam date)
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: 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, precious 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, precious 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 neo-classicism, 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 3014W Art of India
4 credit(s); Credit will not be granted if credit has been received for: ALL 3014W; Meets CLE req of Arts/Humanities;
ArtH 3014W Art of India
4 credit(s); Credit will not be granted if credit has been received for: ALL 3014W; Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Asher, Frederick M
Description: When one thinks of the countries comprising South Asia - India, Pakistan, Afghanistan and Bangladesh - Westerners often think of massive social, political and economic problems. Not adequately recognized, however, is the power of art in the region: the power to induce the Taliban to destroy the massive and world renown Bamiyan Buddhas, the power to stimulate mobs intent on ransacking an exhibition of art or to destroy a mosque of great historical importance. By looking at the power of art in this part of the world, we can better reflect on the power of the visual world around us every day. Simply stated, the art of South Asia is extraordinary. The course will examine both secular art and the works produced for the region's several religions, reflecting a diversity not unlike that of the United States. In the process, students will be given an opportunity to examine critically art and its production as well as the ways in which the art has been used and understood both at the time of its creation and subsequently. There will be two exams and one paper. Discussion sections will offer the opportunity to probe the material in greater depth and review as necessary. All material discussed in class will be available on the Web. The course assumes neither prior knowledge of India nor of art history.
Style: 80% Lecture, 20% Discussion.
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.
Exam Format: Brief essay

ArtH 3015W Art of Islam
4 credit(s); Credit will not be granted if credit has been received for: CLCV 3015W; Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Asher, Catherine B
Description: Learn about the importance of art and architecture in the development of Islamic society and culture. This course will focus on the Art of Islam from the origins of Islam to the present, covering much of the Islamic world including the Middle East, South and Southeast Asia, China, sub-Saharan Africa and the USA. Focus will be on architecture and painting, among other arts. The cultural, political and religious milieu, as well as the role of the patron under which art works were created, will be discussed. The material will be approached geographically and chronologically; throughout the course the features and themes that unify the diverse artistic trends and styles produced throughout the Islamic world will be discussed. All images shown in class will be available for viewing on the course web site.
Style: 80% Lecture, 15% Discussion. A once a week section is also part of the class.
Grading: 25% final exam, 35% reports/papers, 20% quizzes, 10% class participation, 10% other evaluation. Log book which is written in class.
Exam Format: Short essay

ArtH 3018 Egypt and Western Asia: Art and Archaeology of Ancient Egypt and Western Asia
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives
Instructor: Canepa, Matthew P.
Description: This course explores the fascinating world of pyramids, ziggurats and the world's first cities from the dawn of civilization to end of the ancient world. It will provide students with foundational knowledge in the art, architecture and archaeology of Egypt, Anatolia, Mesopotamia, Iran and Central Asia from the Neolithic through Late Antiquity (ca. 12,000 B.C.E. - 650 C.E.). Instead of stopping at the invasions of Alexander, the traditional endpoint in most surveys of ancient Egypt and Western Asia, this course provides students a view of the intriguing world of Hellenistic Asia and the rise of the last Iranian dynasties before Islam. Students will gain an understanding of the relationship between the visual material and the social, intellectual, political and religious contexts in which it developed and functioned. In this regard, students will also gain an understanding of the evolution of, and exchanges and differences among, the visual cultures of these time periods and regions.
Grading: 50% mid exam, 30% final exam, 15% reports/papers, 5% attendance. Two midterms (25% each); one final (30%). Two short (4 page) papers closely describing a work of art in a local collection like the MIA.
Exam Format: Vocabulary, short answer; majority essay.

ArtH 3205 Introduction to Aztec, Maya, and Inka Art, from Ancient Times to the Colonial Period
3 credit(s); Credit will not be granted if credit has been received for: RELS 3322; Meets CLE req of Arts/Humanities
Instructor: Afanador-Pujol, Angelica J
Description: This course introduces students to the art history of indigenous peoples from Mexico, Central America, and South America before the arrival of Europeans. We will study their prolific artistic production starting with their earthworks in the deserts of Peru and ending with their stone pyramids and painted codices of Guatemala and Mexico. We will critically analyze how these cultures produced, shaped, and used art to shape the world around them. This class will equip you with the tools to investigate Pre-Columbian art at more advanced levels.
ArtH 3311 Baroque Art in Seventeenth Century Europe  
3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Ostrow, Steven F  
Description: This course examines the dominant trends and figures of the Italian, French, Spanish, Flemish, and Dutch Baroque period. We will explore the works of major masters including Caravaggio, Bernini, Poussin, Velazquez, Rembrandt, and Rubens, as well as such issues as the development of illusionistic ceiling decoration, the theoretical basis of Baroque art, the politics of early modern art in Europe, and art's subservience to the Church and the royal court.  
Style: 80% Lecture, 20% Discussion.  
Grading: 35% midexam, 35% final exam, 20% reports/papers, 10% attendance.  
Exam Format: Slide identifications and comparisons; short essays

ArtH 3627 Seminar: Harlem Renaissance  
3 credit(s); Credit will not be granted if credit has been received for: AFRO 3627;  
Instructor: Wright, John S  
Description: Student may contact the instructor or department for information.

ArtH 3930H Honors: Junior-Senior Seminar: Contemporary Cinema  
A-F only, 3 credit(s);  
Instructor: Silberman, Robert B  
Description: This course will examine the full range of contemporary cinema and media culture, including large-budget studio blockbusters and low-budget indies, fiction films and documentaries, films from the U.S. and around the world, animation and avant-garde experiments, television and new media. Students will consider individual works and the broader issues they raise, using different critical methodologies to explore the economic, technical, social, political, and aesthetic aspects of contemporary cinema. Each week students will view at least one film currently in the theaters and at least one supplementary work.

ArtH 3940 Topics in Art History: GMD App: Conceptualizing an App for the Goldstein  
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. Open to majors and non-majors. Speak with the ArtH DUGS for more information.  
Style: On-site internship.

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: Silberman, 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-Pujol, 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, Matthew P.
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: Kim, Minku
Description: Student may contact the instructor or department for information.

ArtH 3994 Directed Research
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 3994 Directed Research
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 3994 Directed Research
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 3994 Directed Research
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Silberman, Robert B
Description: Student may contact the instructor or department for information.

ArtH 3994 Directed Research
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Blocker, Jane M
ArtH 3994 Directed Research
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 3994 Directed Research
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 3994 Directed Research
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 3994 Directed Research
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 3994 Directed Research
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Canepa, Matthew P.
Description: Student may contact the instructor or department for information.

ArtH 3994 Directed Research
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Kim, Minku
Description: Student may contact the instructor or department for information.

ArtH 5115 Hellenistic and Iranian Asia: Art and Archaeology of Hellenistic, Scythian, Kushan, and Sogdian Asia
3 credit(s);
Instructor: Canepa, 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 5454 Design Reform in the Era of Art Nouveau
3 credit(s);
Instructor: Weisberg, Gabriel
Description: The design reform era (1885-1930) is examined in France, Belgium, England, Germany, Austria, Scotland and the United States. Innovations in architecture, graphic arts, the applied arts (furniture, jewelry, fabrics) are studied. The major promoters and pioneers of modern design are discussed in this slide lecture class. Critical issues of design reform are examined; texts are integrated with a discussion of the principal monuments. Course texts include: Jeremy Howard, Art Nouveau, International and National Styles in Europe (1996) and Debora L. Silverman, Art Nouveau in Fin de Siecle France, Politics, Psychology and Style (1989). The target audience includes all students interested in visual culture, the history of thematic art history and humanities majors, art history majors. Slide reviews strengthen learning, a research paper, worked out through discussions with the professor, is essential. Original thematic content encouraged. Style: 80% Lecture, 20% Discussion. Grading: 30% mid exam, 40% final exam, 30% reports/papers. Exam Format: Slide exams and essays
ArtH 5565 American Art in the Gilded Age
3 credit(s);
Instructor: Marshall PhD, Jennifer Jane
Description: Student may contact the instructor or department for information.

ArtH 5766 Chinese Painting
3 credit(s);
Instructor: Kim, Minku
Description: Student may contact the instructor or department for information.

ArtH 5777 The Diversity of Traditions: Indian Art 1200 to Present
3 credit(s);
Instructor: Asher, Catherine B
Description: This course will consider the development of Indian art and architecture from the introduction of Islam as a major political power at the end of the 12th century to the present. The Muslim rulers brought new traditions, for example, the tomb, of which the most famous example is the Taj Mahal built in the mid-17th century. We will study the developments leading to this magnificent structure as well as the schools of painting that are the products of Muslim and Hindu rulers. The course will also consider artistic production in the important Hindu, Sikh and Christian kingdoms that ruled India concurrently with the great Muslim powers. In the 18th century, colonial forces entered the Indian subcontinent, resulting in significant innovative artistic trends. We will discuss these as well as the subsequent nationalist schools that develop just before Independence prior to 1947. We will probe which forms and ideas seem to be inherently Indian, asking which ones transcend dynastic, geographic and religious differences and which forms and ideas are consistent throughout these periods of political and ideological change. This class will be a combination of lecture and discussion. Undergraduates will write a 8-10 page research paper; graduate students should see the instructor for requirements. Images will be available on the class Moodle web site.
Style: 70% Lecture, 30% Discussion.
Grading: 88% reports/papers, 12% class participation.
Exam Format: take home essays

ArtH 5802 Art of the Inka and their Ancestors
3 credit(s); Credit will not be granted if credit has been received for: AMIN 5802;
Instructor: Afanador-Pujol, Angelica J
Description: This upper-division course is designed to provide students with a greater knowledge of the art and architecture of the Inka and their ancestors in the Andes of South America from the time of their first appearance in the archaeological record until the Spanish invasion in the sixteenth century. We will study their prolific artistic production starting with textiles, gold works, and earthworks in the deserts of coastal Peru and ending with their exquisite stone architecture in the Andes mountains.
Grading: 20% mid exam, 25% final exam, 25% reports/papers, 10% special projects, 10% in-class presentation, 10% class participation.

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.

ArtH 5993 Directed Study
A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;
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, Matthew P.
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: Kim, Minku
Description: Student may contact the instructor or department for information.

ArtH 8001 Art Historiography: Theory and Methods
A-F only, 3 credit(s);
Instructor: Gaudio, Michael
Description: Student may contact the instructor or department for information.

Arts and Cultural Leadership  20 Ruttan Hall

ACL 8001 Introduction to Interdisciplinary Inquiry
A-F only, 3 credit(s);
Instructor: Gustafson, Donna Mae J
Description: Student may contact the instructor or department for information.

ACL 8001 Introduction to Interdisciplinary Inquiry
A-F only, 3 credit(s);
Instructor: Gonzalez, Anita
Description: Student may contact the instructor or department for information.

ACL 8002 Final Project Seminar
S-N only, 3 credit(s);
Instructor: Corley, Kathleen Hayes
Description: Student may contact the instructor or department for information.

ACL 8202 Nonprofit Board Practicum
A-F only, 1 credit(s), max credits 2;
Instructor: Ober, Gayle Marie
Asian American Studies 214 Social Sciences Building

AAS 1101 Imagining Asian America
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Onishi, Yuichiro
Description: According to the recent U.S. Census, Asian Americans, including long-time residents and newcomers, are the second fastest growing racial/minority population in the United States. Asian immigrants and refugees now make up about half of the people immigrating to the United States. Their histories, cultures, and experiences are crucial to understanding both historical and contemporary formations of American citizenship, identities, and values. This course is an introduction to the field of Asian American Studies, an interdisciplinary field that uses histories, films, memoirs, and other texts to study how the history of Asian immigration to the United States 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.

AAS 1101 Imagining Asian America
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Onishi, Yuichiro
Description: Student may contact the instructor or department for information.

AAS 1101 Imagining Asian America
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Kim, Na-Rae
Description: Student may contact the instructor or department for information.

AAS 1902 Freshman Seminar: Asian American Experiences
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Lee, Richard M
Description: This seminar examines the nature and meaning of being Asian American in the United States, with a particular focus on immigrant, refugee, second-generation, and adoptee communities that are unique to Minnesota and the Midwest. Students will learn about the history, struggle, and success of Asian Americans. Drawing upon psychological theory and research, as well as interdisciplinary ethnic studies scholarship, the seminar engages students in a critical analysis of the ways in which race, ethnicity, and migration affect the everyday lives of Asian American individuals and families.
Grading: 10% attendance, 10% in-class presentation. 20% 1-page weekly response papers; 20% mid-term portfolio; 20% end-of-term portfolio; 20% group book project.

AAS 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: Park, Lisa Sun-Hee
Description: Understanding the social significance of race, class, and gender is pivotal to understanding society itself. These social constructions organize our everyday lives and, their implications?both independently and in relation to each other?are far-reaching for everyone. And, as constructions, these dynamic social categories require constant maintenance. This course will explore the roles and functions of these categories, how we maintain them, and their larger implications. To achieve this objective, strong critical thinking and writing skills are required. Critical analysis goes beyond mere summary of someone else?s idea; it requires an additional level of inquiry based upon a synthesis of multiple perspectives and a deeper reading of the central concepts. Regardless of your current and future interests, the capacity to critically analyze a complex phenomenon and powerfully articulate your idea in written form is indispensable. As a writing-intensive course, the assignments and exams for this course are intended to develop and strengthen your ability to clearly and concisely articulate an original argument with convincing supporting evidence.
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 20% special projects, 10% in-class presentation.

AAS 3303W Writing Differences: Literature by U.S. Women of Color
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3303W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Desai, Jigna
Description: Dragon Ladies, Lotus Blossoms, and Tiger Moms are some of the ways that Asian American women are understood and framed within dominant American culture. This semester, this course will focus on writings by Asian
American women. This is in an exciting moment when writings by Asian American women are widely published and acknowledged as new, significant voices that explore intersections of language, cultural and national identities, race, gender, sexuality, and class in American discourse. This course will introduce students to a wide range of texts by Asian American women writers. Through these creative expressions, we will examine the histories, cultures, languages, and identities of Asian American women looking at questions of war, empire, migration, family, labor, community, their representations of migration, family, work, and community. We will think about how the aesthetic form is used, mobilized, and transformed in order to tell stories about Asian America. Texts include: The Woman Warrior, Interpreter of Maladies, The Temperature of this Water, and Migritude

AAS 4383 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 4383 Hmong History Across the Globe
3 credit(s);
Instructor: Pfeifer,Mark Edward
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 3875W Comparative Race and Ethnicity in U.S. History
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;Meets CLE req of Writing Intensive
Instructor: Onishi,Yuichiro
Description: Student may contact the instructor or department for information.

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.

AAS 4311 Asian American Literature and Drama
A-F only, 3 credit(s);Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature
Instructor: Lee,Josephine D
Description: This course focuses on the literary and theatrical contributions of American artists of Asian descent. Through these novels, memoirs, poetry, stories, and plays, we can understand the particular connections between literary form,
expression, and production and the social formations of race, ethnicity, nationalism, class, gender, and sexuality. Asian Americans come from a diverse range of national and cultural backgrounds; likewise their literature and drama presents many different perspectives and experiences. This course will not attempt a survey of these works; rather our readings and discussions will reflect particular preoccupations that regularly surface in these works. These include migration (and its accompanying states of disorientation and acts of reinvention), racism and stereotypes, the "road trip," and redefining home. We'll pay special attention to Asian American experiences in Minnesota and other parts of the Midwest. This course satisfies the core requirement for the Asian American Studies minor as well as elective requirements for the English major and minor.

**Style:** 10% Lecture, 75% Discussion, 10% Small Group Activities, 5% Student Presentation.

**Grading:** 75% reports/papers, 15% attendance, 10% class participation.

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**AAS 4920 Topics in Asian American Studies: Anthropology of American Culture**

3 credit(s), max credits 8;

**Instructor:** Ho,Karen

**Description:** This course will explore American cultures and values through an examination of race/ethnic, gender, and class relations, and cultural politics in the 21st century. We will focus on the transnational and heterogeneous histories and relationships among multiple communities such as African Americans, whites, Asian Americans, Latinos, and Native Americans. We will also focus on the workings and the changing cultural values of the U.S. by examining a variety of sites and situations such as the workplace and the economy, immigration, family, the urban environment, poverty, multiculturalism, and globalization. We will explore a variety of American identities, communities, and institutions as pivotal sites to understand the dynamics of race/ethnicity, class, gender, and sexuality. This course is interdisciplinary, as it draws from anthropology, ethnic studies, American Studies, sociology, urban and global studies, history, and film. This course is intended for undergraduate majors as well as non-majors.

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

**Grading:** 25% mid exam, 35% final exam, 15% in-class presentation, 25% class participation.

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**Asian Languages and Literatures**

220 Folwell Hall

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**ALL 3001 Reading Asian Cultures**

A-F only, 3 credit(s);

**Instructor:** Marran,Christine L

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

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**ALL 3014W Art of India**

4 credit(s); Credit will not be granted if credit has been received for: ARTH 3014W; Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives; meets CLE req of Writing Intensive

**Instructor:** Asher,Frederick M

**Description:** When one thinks of the countries comprising South Asia - India, Pakistan, Afghanistan and Bangladesh - Westerners often think of massive social, political and economic problems. Not adequately recognized, however, is the power of art in the region: the power to induce the Taliban to destroy the massive and world renown Bamiyan Buddhas, the power to stimulate mobs intent on ransacking an exhibition of art or to destroy a mosque of great historical importance. By looking at the power of art at this part of the world, we can better reflect on the power of the visual world around us every day. Simply stated, the art of South Asia is extraordinary. The course will examine both secular art and the works produced for the region's several religions, reflecting a diversity not unlike that of the United States. In the process, students will be given an opportunity to examine critically art and its production as well as the ways in which the art has been used and understood both at the time of its creation and subsequently. There will be two exams and one paper. Discussion sections will offer the opportunity to probe the material in greater depth and review as necessary. All material discussed in class will be available on the Web. The course assumes neither prior knowledge of India nor of art history.

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

**Grading:** 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.

**Exam Format:** Brief essay

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**ALL 3337 Chinese Literature and Popular Culture Today**

A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature

**Instructor:** McGrath,Jason

**Description:** This course is an introductory survey of contemporary Chinese literature and popular culture. The primary focus will be on mainland China since the end of the Mao era, but attention will also be paid to Taiwan and Hong Kong. During this period mainland China made the transition from Maoism to the era of 'opening and reform,' leading to an explosion of creativity in the arts beginning in the 1980s and an increasingly commercialized and globalized culture since the early 1990s. The culture industry has been subjected to market forces for the first time in decades, and foreign cultural products have entered China to compete with domestic culture. Taiwan during these same periods made the transition from martial law to democracy and developed into one of the most thriving economies and cultural scenes in the region, while
Hong Kong was returned from the United Kingdom to China and maintained its status as one of the world's most cosmopolitan cities. This course explores the dynamism of Chinese culture of the last quarter century through works of literature as well as film, fine art, and popular music.

**Style:** 60% Lecture, 35% Discussion, 5% Student Presentation.

**Grading:** 20% mid exam, 35% final exam, 20% reports/papers, 10% quizzes, 10% attendance, 5% in-class presentation.

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**ALL 3361W Maps, Pictures, and Writing in the Representation of Taiwan**

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:** Allen, Joseph R

**Description:** We will consider the way the cultures of East Asia (China, Japan, and Taiwan) have shaped the cultural identity of the people on Taiwan, with special concern given to the concepts of colonialism and indigenous autonomy. We will explore how visual media (maps, pictures, photographs, and film) and written texts (travelogues, stories, and essays) are used to contribute to the representation of the people, place, and history of Taiwan, viewed in both historical and contemporary contexts. Other areas will include: the legacy of Fukinese (Min'nan) local culture; the question of aboriginal peoples (yuanzhumin) in Taiwan; the presence of American military during the cold war; and the emergence of a global culture in the late 20th century. While the focus of this course is Taiwan, we will be considering larger issues of the representations of ethnicity, culture, and national identity.

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**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.

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**ALL 3436 Postwar Japanese Literature in Translation**

3 credit(s);

**Instructor:** Marran, Christine L

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

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**ALL 3556 Korean Film**

3 credit(s);

**Instructor:** Workman, Travis

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

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**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.

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**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 3771 History of Southeast Asia
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Lee, Mai Na M.
Description: This course provides a general introduction to Southeast Asia's past and present. The course is organized chronologically around three broad periods: 1) traditional states and societies (to 1800); 2) colonial transformations and indigenous responses (1800-1945); and 3) the emergence of nation-states: Indonesia, Thailand, and Philippines. Topics and themes include: the origins of indigenous states; religious conversion and practice; ethnicity, social organization, and gender relations; modern social and economic transformations; response to colonial domination; the development of "imagined communities" and nationalist and revolutionary movements; post-colonial societies and political systems; ethnic conflict and national integration; the impact of Cold War international relations; and U.S. involvement in the region. Grading: 2 midterms, 1 paper, final exam, discussions.
Style: 90% Lecture, 10% Discussion.
Exam Format: essay

ALL 3771 History of Southeast Asia
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Thao, Mai See
Description: This course provides a general introduction to Southeast Asia's past and present. The course is organized chronologically around three broad periods: 1) traditional states and societies (to 1800); 2) colonial transformations and indigenous responses (1800-1945); and 3) the emergence of nation-states: Indonesia, Thailand, and Philippines. Topics and themes include: the origins of indigenous states; religious conversion and practice; ethnicity, social organization, and gender relations; modern social and economic transformations; response to colonial domination; the development of "imagined communities" and nationalist and revolutionary movements; post-colonial societies and political systems; ethnic conflict and national integration; the impact of Cold War international relations; and U.S. involvement in the region. Grading: 2 midterms, 1 paper, final exam, discussions.
Style: 90% Lecture, 10% Discussion.
Exam Format: essay

ALL 3876 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.

ALL 3920 Topics in Asian Culture
3 credit(s), max credits 9, 3 completions allowed;
Instructor: STAFF
Description: The History of Modern Korea This is a course focused on the historical experience of Modern Korea. Thus we will be reading and discussing a variety of materials drawn from the voluminous historical narratives centered on Korea's "modern" period, 1876-to the present. The major themes of the course focus on the transformation of Korea from an agrarian, bureaucratic/aristocratic society into two, dynamic, authoritarian, industrialized and, in the case of post 1987 South Korea, democratizing, states. We will trace the Korean response to the influx of Western political power in Asia after 1840 and examine the effects of the intrusion of capitalism and imperialism on the Korean peninsula at the end of the 19th century. Since 1900, intellectual, political, social, and economic change in Korea has been extraordinarily rapid. In succession, Koreans have had to endure and respond to a forty year colonial intrusion of Japanese power, a re-occupation after 1945 by the U.S. and Soviet Union, a catastrophic civil war, and the lingering effects of political division. How the modern Korean state and society has evolved as a response to these changes and forces is the central concern of the course. We will have to balance the force of the traditional legacy in the emerging blend of old and new in modern Korea in order to understand the unique shape of contemporary Korea's social/political order and its place in the emerging world order of the 21st century. Korea's twentieth century has spawned a number of contesting historical narratives; we will actively evaluate these different views of the past while we explore the intersection between history and politics.

ALL 3920 Topics in Asian Culture: Japanese Language and Food
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Szatrowski, Polly Ellen
Description: According to the BBC World News (Nov. 17, 2009), Tokyo is "the best place to eat", having 160,000 restaurants, and the most Michelin 3-star restaurants in the world. Japan is presently experiencing a food boom as shown by the great number of restaurants featuring cuisine from all over the world in Tokyo and the numerous cooking and eating shows on Japanese television. The Japanese language has developed many ways to talk about food, including many
cooking terms and special expressions for the tastes, textures, smells, visual features, and sounds associated with food. In this course, we will address the following questions: 1) How do Japanese people organize their language and bodies around food, i.e., how do they use them to get to and from the table, and to proceed in a meal (e.g., at a sushi restaurant)? 2) How is the Japanese language used to taste, identify and assess food, and how do these fine distinctions and discriminations relate to the Japanese identity? 3) How do Japanese people talk about their experience of food and tell stories about food? 4) What linguistic forms and metaphors does the Japanese language have for food and how does the use of the Japanese language in the context of food relate to gender? 5) How is the Japanese language used to socialize children around food? We will explore the relation between the Japanese language and food by analyzing actual Japanese conversations about and while eating a variety of foods. The class will be most rewarding for students who like to cook/eat, talk about food, and educate their palate.

**Style:** 40% Lecture, 30% Discussion, 30% Student Presentation.

**Grading:** 40% reports/papers, 30% written homework, 30% in-class presentation.

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**ALL 3920 Topics in Asian Culture: ian Feminisms in Global Context**

3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Sawhney, Simona

**Description:** A series of rape cases in India in 2012-13 drew widespread public and media attention. In the protests and debates that followed, it became clear that though everyone wanted "justice," there were several disagreements about what "justice" might entail. At stake were not only questions of sexuality, marriage, and foundational ideas about gendered identity, but also questions concerning caste and class, the death penalty, the privilege of the armed forces, the language of the law, and the powers of the police. In this course, we will study some of the arguments that have unfolded in recent months in the context of the history of the feminist movement in India. Readings and films will focus on several issues including the state's response to violence against women, debates about abortion, the political emergence of a gay rights discourse, and the varied anxieties provoked by the sale of sexual pleasure. We will study these issues in relation to comparable debates in the US and in Europe. Through the course of the semester, we will aim to build a more nuanced and critical approach to gender itself, as it is articulated and acted in everyday life as well as in activist and theoretical discourse.

**Style:** 50% Lecture, 25% Film/Video, 25% Discussion.

**Grading:** 30% mid exam, 10% class participation. 20% bi-weekly responses, 40% final paper.

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**ALL 3920 Topics in Asian Culture: North Korea (DPRK): History, Literature, Film**

3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Workman, Travis

**Description:** In this course we learn how to interpret critically the literature, film, and media produced within and about the Democratic People's Republic of Korea, from its establishment in 1948 to the present day. We focus on the ways that literature and visual culture create and recreate "North Korea" as a fantasy space. Within the country, literature, popular films, and propaganda have created fantasies of revolutionary consciousness, real-existing socialism, state subjectivity, national autonomy, Party loyalty, caring leadership, ethnic purity, and the moral righteousness of everyday citizens in the face of imperialist and class enemies. Outside, the country has often served as an unknown territory that inspires fear, hope, resentment, military posturing, and laughter: the Red Scare images of the Cold War and Korean War, postwar memories and contemporary hopes for reunification in South Korea, Black Panther political interest in the 1960s, fictional portrayals of North Korean spies, the consumption of refugee and defector narratives, fascination with communist kitsch, Juche thought reading groups and web-based networks, apocalyptic fantasies of nuclear destruction, South Park and CNN renditions of dictatorship, political science think tank culture, and the attempts of concerned documentarians to capture the "truth" of the country. In order to develop a practice of interpreting critically these many representations of "North Korea," this course will cover the fundamentals of DPRK history, literature, film, and propaganda while also reading outside perspectives. Its primary texts will include: fiction by writers like Han Sorya, Yi Ki-yong, Hong Myong-hui, Kang Ch'ol-hwan, and Kim Young-ha, films like Tale of 15 Children, Girls in My Hometown, Traces of Life, Hong Kil-dong, The Hand of Destiny, The Game of Their Lives, and The Flower Girl, political essays by Kim Il-sung and Eldridge Cleaver, Kim Jong-il's writings on cinema, theoretical discussions of the work of fantasy, and contemporary media from South Korea, the United States, and Japan.

**Style:** 50% Lecture, 25% Film/Video, 25% Discussion.

**Grading:** 30% mid exam, 10% class participation. 20% bi-weekly responses, 40% final paper.

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**ALL 3990 Directed Study**

1-4 credit(s), max credits 16, 4 completions allowed;

**Instructor:** Allen, Joseph R

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

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**ALL 3990 Directed Study**

1-4 credit(s), max credits 16, 4 completions allowed;

**Instructor:** Isaka, Maki

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

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**ALL 3990 Directed Study**
ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Marran, Christine L
Description: Student may contact the instructor or department for information.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Sawhney, Simona
Description: Student may contact the instructor or department for information.

ALL 3990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: McGrath, Jason
Description: Student may contact the instructor or department for information.

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 5920 Topics in Asian Culture: Japanese Language and Food
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Szatrowski, Polly Ellen
Description: According to the BBC World News (Nov. 17, 2009), Tokyo is "the best place to eat", having 160,000 restaurants, and the most Michelin 3-star restaurants in the world. Japan is presently experiencing a food boom as shown by the great number of restaurants featuring cuisine from all over the world in Tokyo and the numerous cooking and eating shows on Japanese television. The Japanese language has developed many ways to talk about food, including many cooking terms and special expressions for the tastes, textures, smells, visual features, and sounds associated with food. In this course, we will address the following questions: 1) How do Japanese people organize their language and bodies around food, i.e., how do they use them to get to and from the table, and to proceed in a meal (e.g., at a sushi restaurant)? 2) How is the Japanese language used to taste, identify and assess food, and how do these fine distinctions and discriminations relate to the Japanese identity? 3) How do Japanese people talk about their experience of food and tell stories about food? 4) What linguistic forms and metaphors does the Japanese language have for food and how does the use of the Japanese language in the context of food relate to gender? 5) How is the Japanese language used to socialize children around food? We will explore the relation between the Japanese language and food by analyzing actual Japanese conversations about and while eating a variety of foods. The class will be most rewarding for students who like to cook/eat, talk about food, and educate their palate.
Style: 40% Lecture, 30% Discussion, 30% Student Presentation.
Grading: 40% reports/papers, 30% written homework, 30% in-class presentation.

ALL 5990 Directed Study
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 5990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Isaka, Maki
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: Marran, Christine L
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: Sawhney, Simona
Description: Student may contact the instructor or department for information.

ALL 5990 Directed Study
1-4 credit(s), max credits 16, 4 completions allowed;
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: Skillman, Evan D
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 extra-terrestrial
This seminar will explore which regions in the solar system may harbor life at present or may have supported life in the past. The prime focus will be on Mars, Earth, comets and satellite worlds of the Jovian planets. We will explore the link between science and science fiction related to our fascination with Mars as a planet for human colonization and contact with "alien life forms." Our discussion of astrobiology will also focus on the potential requirements of the habitability zones in the exo-planetary systems. The necessary conditions for supporting life will also be discussed. We will discuss the historical evolution of this emerging branch of astronomy, discuss the roles of the "citizen scientist" and review the historical evolution of this emerging branch of astronomy, discuss the roles of the "citizen scientist" and review 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. Primary readings will be taken from assigned texts. Other materials also will be used to complement our exploration of this rapidly evolving science frontier. 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 1905 Freshman Seminar: "The Impact" of Cosmic Catastrophes**

**OPT No Aud, 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 also 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. Primary readings will be taken from assigned texts. Other materials also will be used to complement our exploration of this rapidly evolving science frontier. 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 4299H Senior Honors Astrophysics Research Seminar
1 credit(s);
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 5001 Galactic Astronomy
A-F only, 3 credit(s);
Instructor: Humphreys, Roberta M
Description: Student may contact the instructor or department for information.

Ast 8001 Radiative Processes in Astrophysics
4 credit(s);
Instructor: Jones, Thomas Walter
Description: Student may contact the instructor or department for information.

Ast 8200 Astrophysics Seminar
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Scarlata, Claudia Maria
Description: Student may contact the instructor or department for information.

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 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

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: Siliciano, Paul G
Description: Student may contact the instructor or department for information.

BioC 3021 Biochemistry
3 credit(s); [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: Roon, Robert 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 information. 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.
Style: Online
Grading: See attached syllabus

BioC 4025 Laboratory in Biochemistry
2 credit(s);

BioC 3321 Biochemistry
A-F only, 3 credit(s);
Instructor: Takhter, Ramandeep Singh
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: Student may contact the instructor or department for information.
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: short answer and problems

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 4521 Introduction to Physical Biochemistry  
3 credit(s);
Instructor: Aihara, Hideki  
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 5213 Selected Topics in Molecular Biology  
A-F only, 3 credit(s);  
Instructor: Harris, Reuben  
Description: Student may contact the instructor or department for information.

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: Ohlendorf, Douglas Henry  
Description: This class is an introduction to structural biology with descriptions of theories and methods used to obtain conformational data and dynamics of biomacromolecules such as soluble and membrane bound proteins, DNA, RNA, and their complexes at the atomic resolution. A particular emphasis will be put on how structures and dynamics are correlated to biological function. The class includes a description of modern multidimensional NMR, X-ray, and Mass Spectrometry techniques for structural analysis.

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.

**BioC 6021 Biochemistry**  
3 credit(s); 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 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. 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._  
_Style: Online_  
_Grading: See attached syllabus_  

**BioC 6021 Biochemistry**  
3 credit(s); 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: 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._

**BioC 6021 Biochemistry**  
3 credit(s); 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 Molecular Biology and Regulation of Biological Processes
A-F only, 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: Aihara, Hideki
Description: Student may contact the instructor or department 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 the instructor or department for information.

Bioethics, Center for N-504 Boynton Health Service

BTHX 5000 Topics in Bioethics: Gender and the Politics of Health
3 credit(s), max credits 8;
Instructor: DeBruin PhD, Debra Ann
Description: This course explores the moral and political importance of gender in topics related to health. These issues are situated within their institutional and broader social contexts. This course is appropriate for a wide audience including students from the health professions, philosophy, social science, and law. Meets with BTHX 8510 and GWSS 8220

BTHX 5010 Bioethics Proseminar
A-F only, 2 credit(s);
Instructor: Song, John Young
Description: The Proseminar will familiarize graduate students with a wide range of topics in bioethics and the work of a number of faculty affiliated with the program, to help students select mentors and research programs.

BTHX 5210 Ethics of Human Subjects Research
3 credit(s);
Instructor: Turner, Leigh
Description: This course addresses ethics and policy issues in research on human subjects, including an examination of the policy history, the changing models of oversight, and analysis of possible approaches for oversight of controversial areas of science.

BTHX 5300 Foundations of Bioethics
3 credit(s);
Instructor: Liaschenko, Joan
Description: This course provides an overview of major theoretical frameworks and foundational issues in bioethics. This is a core course for the master's program in Bioethics.

BTHX 5610 Research and Publication Seminar
1 credit(s);
Instructor: Miles MD, Steven Haverstock
Description: This seminar is a how-to course in academic publication. It focuses on scientific papers and addresses career publication strategy, selecting publication venues, literature searching, resolving authorship issues, ethics in publication, and special topics in manuscript formatting (structure abstract, paper sections, citations, footnotes, and acknowledgments).

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Miles MD, Steven Haverstock
Description: Students propose an area for study with faculty guidance, expressed in a written proposal which includes outcome objectives and work plan. A faculty member directs the student's work and evaluates their project.
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: Students propose an area for study with faculty guidance, expressed in a written proposal which includes outcome objectives and work plan. A faculty member directs the student's work and evaluates their project.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: DeBruin PhD, Debra Ann
Description: Students propose an area for study with faculty guidance, expressed in a written proposal which includes outcome objectives and work plan. A faculty member directs the student's work and evaluates their project.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Liaschenko, Joan
Description: Students propose an area for study with faculty guidance, expressed in a written proposal which includes outcome objectives and work plan. A faculty member directs the student's work and evaluates their project.

BTHX 5900 Independent Study in Bioethics
1-4 credit(s), max credits 8;
Instructor: Valapour, Maryam
Description: Students propose an area for study with faculty guidance, expressed in a written proposal which includes outcome objectives and work plan. A faculty member directs the student's work and evaluates their project.

BTHX 8000 Advanced Topics in Bioethics: Nanotechnology, Law & Society
3 credit(s), max credits 8;
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.
BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-4 credit(s), max credits 16, 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, 1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Song, John Young
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-4 credit(s), max credits 16, 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, 1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Liaschenko, Joan
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Valapour, Maryam
Description: Student may contact the instructor or department for information.

BTHX 8500 Practicum in Bioethics
OPT No Aud, 1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Turner, Leigh
Description: Student may contact the instructor or department for information.

BTHX 8510 Gender and the Politics of Health
3 credit(s);
Instructor: DeBruin PhD, Debra Ann
Description: This course explores the moral and political importance of gender in topics related to health. These issues are situated within their institutional and broader social contexts. This course is appropriate for a wide audience including students from the health professions, philosophy, social science, and law. Meets with BTHX 8510 and GWSS 8220

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: Song, John Young
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: Valapour, Maryam
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: 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, homework.
Exam Format: multiple choice lecture exams

Biol 1001H Introductory Biology I: Evolutionary and Ecological Perspectives
A-F only, 4 credit(s); Honors Credit will not be granted if credit has been received for: BIOL 1001; Meets CLE req of Biological Sciences
Instructor: Packer, Craig
Description: Student may contact the instructor or department for information.

Biol 1003 Evolution and Biology of Sex
4 credit(s); Credit will not be granted if credit has been received for: BIOL 1001; Meets CLE req of Biological Sciences
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 1009 General Biology
4 credit(s); high school chemistry; 1 term college chemistry recommended Credit will not be granted if credit has been received for: BIOL 1009H; Meets CLE req of Biological Sciences
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.
Biol 1009 General Biology
4 credit(s); high school chemistry; 1 term college chemistry recommended
Credit will not be granted if credit has been received for: BIOL 1009H
Meets CLE req of Biological Sciences
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
Grading: 16% laboratory evaluation. See attached syllabus

Biol 1010 Human Biology: Concepts and Current Ethical Issues
4 credit(s); Meets CLE req of Biological Sciences; meets CLE req of Civic Life and Ethics
Instructor: Phillips, Jane Ann
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.

Biol 1020 Biology Colloquium
S-N only, 1 credit(s), max credits 2;
Instructor: Silflow, Carolyn D.
Description: Student may contact the instructor or department for information.

Biol 1050 Environmental Biology: Science and Solutions
3 credit(s); Meets CLE req of Environment
Instructor: Wassenberg, Deena Marie
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 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. For more information contact Deena Wassenberg (deenaw@umn.edu)

**Biol 1055 Environmental Biology: Science and Solutions with Laboratory**  
4 credit(s); Meets CLE req of Biological Sciences; meets CLE req of Environment  
**Instructor:** Wassenberg, Deena Marie  
**Description:** Student may contact the instructor or department for information.

**Biol 1093 Biology Colloquium: Directed Study**  
S-N only, 1 credit(s);  
**Instructor:** Silflow, Carolyn D.  
**Description:** Student may contact the instructor or department for information.

**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:** Pyawasay, Sasanehsaeh Margaret  
**Description:** Student may contact the instructor or department for information.

**Biol 1301 Becoming a Reflective Leader**  
S-N only, 1 credit(s);  
**Instructor:** Letawsky Shultz, Nikki  
**Description:** This course is for students in the CBS Deans' Scholars program. It is designed for students to learn about leadership theory and concepts, explore personal views on leadership, and understand the value of self-reflection in personal development. The course will provide students with a framework to increase their understanding of leadership and examine how they can be more intentional about their leadership development.

**Biol 1301 Becoming a Reflective Leader**  
S-N only, 1 credit(s);  
**Instructor:** Economos, Kristin Ann  
**Description:** This course is for students in the CBS Deans' Scholars program. It is designed for students to learn about leadership theory and concepts, explore personal views on leadership, and understand the value of self-reflection in personal development. The course will provide students with a framework to increase their understanding of leadership and examine how they can be more intentional about their leadership development.

**Biol 1805 Nature of Life: Introducing New Students to the Biological Sciences**  
S-N only, 0.5 credit(s), max credits 1;  
**Instructor:** Wright, Robin  
**Description:** Student may contact the instructor or department for information.

**Biol 1905 Freshman Seminar for the Biological Sciences: Ignorance: The Source of Ideas that Propels Science**  
A-F only, 1 credit(s), max credits 6;  
**Instructor:** Lehman, Clarence L  
**Description:** Student may contact the instructor or department for information.

**Biol 1905 Freshman Seminar for the Biological Sciences: I'll Sleep When I'm Dead**  
A-F only, 1 credit(s), max credits 6;  
**Instructor:** Strain PhD, Anna Karin  
**Description:** There's an old saying: 'I'll sleep when I'm dead.' College life is synonymous with intentional sleeplessness. We stay up late studying, getting together with friends, playing computer games, reading (always for class, of course), and just in general because we can. But what if you really couldn't sleep? What would happen to your body if you were never able to sleep? Why does sleep matter, anyway? This seminar will explore the book *The Family That
Couldn’t Sleep?, the true story of an Italian family that suffers from fatal familial insomnia, a genetic disorder that causes the sufferer to stop sleeping, eventually leading to death. Along the way, we’ll discuss how researchers have investigated this and other medical mysteries, prions, mad cows, as well as the current scientific hypotheses behind the need for sleep.

Biol 1905 Freshman Seminar for the Biological Sciences: How to Think about Weird Things
A-F only, 1 credit(s), max credits 6;
Instructor: Mosser, Anna
Description: Have you ever wondered if there is any truth to extrasensory perception (ESP), alien abduction, or spontaneous human combustion? Well, let’s think about it! This seminar will lead us through the process of thinking critically and logically about wild and wonderful things, guided by the book How to Think About Weird Things (by T. Schick and L. Vaughn, McGraw-Hill publishers). We’ll learn about the elements of a good argument and reliable science and apply these to the weirdest topics we can think of. The results may surprise you. You will also build skills that will help you through your college courses and beyond.

Biol 1905 Freshman Seminar for the Biological Sciences: Curing Cancer
A-F only, 1 credit(s), max credits 6;
Instructor: Campbell, Colin R
Description: The objective of the course is to develop a basic understanding of the molecular origins of cancer, how it is currently treated, and the exciting efforts to develop new, more effective anti-cancer drugs. The class will read and discuss two recent books "The Emperor of all Maladies" by Siddhartha Mukherjee and "The Immortal Life of Henrietta Lacks". Each session will involve interactive discussions and a lively exchange of thoughts and ideas.

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.

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.

Biol 1905 Freshman Seminar for the Biological Sciences: Critical Thinking and Weird Thinking in Science
A-F only, 1 credit(s), max credits 6;
Instructor: Biesboer, David D.
Description: This course will encourage students to develop critical thinking skills as they begin their careers as scientists. As a student, you need only to be curious, creative, and willing to learn some new ways of looking at the physical and natural world around you. The class will involve some readings, some simple writing assignments and many discussions over a wide range of topics. Some topics will be biological in nature but we will look at some crazy and wild concepts such as UFOs, homeopathic medicine, chiropractic logical fallacies, cryptozoology, para-normality, supernaturalism, the placebo effect, and other pseudoscience topics as they might arise. Students will be required to give a short (but easy) presentation to the class.

Biol 1905 Freshman Seminar for the Biological Sciences: From Ebola to H1N1: Emerging Human Viruses
A-F only, 1 credit(s), max credits 6;
Instructor: Wick, Susan M
Description: In this class we will examine aspects of human culture, human behavior, world population, and the environment that relate to the emergence of some infectious and sometimes deadly viral diseases. Our emphasis will not be so much on diagnosis and treatment of the deadly diseases that these viruses cause, but rather on social and environmental changes that have contributed to the emergence of these viruses in human populations, often from a natural reservoir in wild or domesticated animals. Students will have the opportunity in groups to examine one of several viral diseases, explore possible solutions to solve problems caused by viral outbreaks, and present their findings and recommendations to the class.
Biol 1905 Freshman Seminar for the Biological Sciences: Ignorance: The Source of Ideas that Propels Science
A-F only, 1 credit(s), max credits 6;
Instructor: Elde, Robert Philip
Description: Student may contact the instructor or department for information.

A-F only, 1 credit(s), max credits 6;
Instructor: Hackett Jr, Perry B
Description: DNA and Genomes? they are discussed in just about every modern context, from modern medical science and biotechnology to crime scene investigations, law, medical insurance policies, and ethics of retooling animal and plant genomes. In this seminar we will consider interfaces between science, politics, religion and the press. The topic will begin with some of the recent findings of science and medicine and then consider some ramifications that you will encounter in your daily lives as genomics plays a larger role as applications develop. Students and visitors will discuss a variety of topics including bioethics, genetic counseling, CSI in Minnesota, and a state legislator, as well as DNA profiling in medicine, the future of retooling of plant and animal genomes, and human evolution in the future. We will try to develop personal strategies that will allow us to evaluate controversies pertaining to recent findings and applications of DNA technologies.

Biol 1905 Freshman Seminar for the Biological Sciences: How to Win a Nobel Prize
A-F only, 1 credit(s), max credits 6;
Instructor: Gibbens PhD, Brian
Description: Have you ever wondered how scientists win the Nobel Prize? In this class we?ll talk about the discoveries that led to several Nobel Prizes in biology. In addition to learning about the prizes themselves and the research behind them, we?ll also spend time talking about how to improve your thinking; you?ll learn how to think both critically and creatively. You?ll learn new methods to help you brainstorm and think outside the box. In short, we?ll learn where good ideas come from. We?ll also talk about logical fallacies and other traps researchers sometimes fall into and how you can avoid them. Classwork will involve lots of discussions, some low-stakes writing, and one in class presentation.

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
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.

Biol 1905 Freshman Seminar for the Biological Sciences: Be Like Jobs
A-F only, 1 credit(s), max credits 6;
Instructor: Fendos, Justin Eric
Description: Steve Jobs and other successful individuals are often set apart from their peers by the ability to communicate effectively. Clarity, focus, and simplicity are some of the characteristics that drove the innovation of Apple?s more successful products while also allowing Jobs to be an effective communicator. Especially for science students of this century, the ability to give Powerpoint presentations is one of the most useful and important skills for success. This course will cover some of the more basic elements of a good science-oriented Powerpoint while providing a forum for students to practice their presentation skills and critique the performance of others.

Biol 1905 Freshman Seminar for the Biological Sciences: Understand: 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: Marine Microcosms
A-F only, 1 credit(s), max credits 6;
Instructor: Wright, Robin

Description: Coral reefs are among the most amazing ecosystems in the world, if not the entire universe. Since we don't live near an ocean where we can explore these amazing reefs in person, come join me to do the next best thing! In this class, you'll learn how to set up, maintain, and enhance artificial reefs in a saltwater aquarium. We'll use our reef microcosms to explore aspects of marine biology, such as the impact of climate change and acidification on reef organisms. It's the next best thing to scuba diving in the Caribbean!

Biol 1905 Freshman Seminar for the Biological Sciences: Genome
A-F only, 2 credit(s), max credits 6;
Instructor: Matthes, David J

Description: In this seminar we will explore the nature of the human genome at an introductory level, discovering how our chromosomes are organized, what genes look like, and how the instructions therein give rise to a human being. We will use Matt Ridley's Genome: The Autobiography of a Species in 23 Chapters as a guide. An essential second text for this course is your own genome sequence. It is important that you read the terms of service and privacy statement at 23andme before registering for this course as you need to consider carefully the possible effects of gaining such personal information about yourself. In the course you will often be asked to share information about your genome but will always be able to choose which aspects in particular you are comfortable sharing. By the end of the course you will have a deeper insight into your ancestry, physical traits, predispositions, and genetic risk for disease. You will also have explored the scientific, medical, ethical and societal issues that we face as we enter the era where access to individual genome sequences becomes commonplace.

Biol 1905 Freshman Seminar for the Biological Sciences: What's the Alternative to Alternative Medicine?
A-F only, 1 credit(s), max credits 6;
Instructor: Zuk, Marlene

Description: So-called alternative remedies, including acupuncture, herbal supplements, homeopathy, and more are immensely popular in the United States; depending on what's included, more than a third of adults are using these treatments. Some medical schools and hospitals are expanding their courses or research areas to include complementary and alternative approaches. In addition, some parents are wary of public health regulations such as mandatory vaccination for school children, saying that they want the option to choose what is best for their families. Do these alternative approaches work as well as or better than conventional medicine? And should parents be concerned about recommended vaccines? In this seminar, we will critically examine the claims made by proponents of alternative medicine. Along the way, we will learn how scientists evaluate evidence, how people's biases influence their conclusions about health, and what kind of information we need to have before we understand the best treatments.

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, 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, 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, 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.
Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: Mraz, 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: Mosser, Anna
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.
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%)

Grading: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities.

Biological Sciences

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.

Class time: 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.
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);[CHM 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 2003 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: Mosser, Anna
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 bio-molecules 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.

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; Meets CLE req
Instructor: Mosser, Anna
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 bio-molecules 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.

Biol 2004 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.
Biol 2004H Foundations of Biology for Biological Sciences Majors, Part II Laboratory
A-F only, 3 credit(s);[2002 or 2002H], honorsCredit will not be granted if credit has been received for: BIOL 2004;
Instructor: Kirkpatrick, Catherine
Description: Biol 2004H is intended for majors in the College of Biological Sciences. It accompanies Biol 2003H. 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.

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 biologyCredit will not be granted if credit has been received for: BIOL 2005;
Instructor: Barker, Fredrick K
Description: The course provides a framework for understanding the major groups of animals (phyla) on Planet Earth, ranging from unicellular protozoa to arthropods and mammals and including their marine, freshwater, and terrestrial representatives. The phyla are traced through evolutionary time to see how they solved the common problems of existence (e.g., feeding, movement, respiration, reproduction) and how their solutions have given rise to changing levels of structural complexity. Video clips and slides are liberally used to illustrate aspects of behavior, ecology, and relevance to human well-being. The laboratory is an integral part of the course; activities are hands-on and require dissections. The course is designed for undergraduate students in liberal arts and natural sciences and for pre-professional students in health sciences, agriculture, and natural resources. Lecture exams are based largely on lecture content and review questions from the text. Laboratory tests are practicum exams quizzing knowledge of actual specimens. The lecture text is Hickman et al., Animal Diversity, (5th ed). The lab text is Smith and Schenk, Exploring Zoology: A Laboratory Guide.
Style: 73% Lecture, 27% Laboratory.
Grading: 4 lecture exams; 4 lab exams
Exam Format: Lecture exams require short answers based on specific knowledge of concepts presented in lecture

Biol 2022 General Botany
A-F only, 3 credit(s);
Instructor: Ward, John M
Description: Scientific principles of plant biology including the evolution, anatomy, physiology, growth and development, and reproductive biology of plants and plant-like organisms. Includes lab.
Style: 60% Lecture, 40% Laboratory.
Grading: 100% other evaluation. 60% lecture, 40% laboratory
Exam Format: multiple choice

Biol 2301 Leadership and Service
S-N only, 2 credit(s);
Instructor: Stein, Meaghan
Description: This course is designed for students in the CBS Dean's Scholars program 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 students with an opportunity to partner with a community organization for 20 hours during the semester, based on articulated service outcomes.

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
Biol 3001 Nature of Science and Research
S-N only, 1 credit(s);
Instructor: Phillips, Jane Ann
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: Moeller, David
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: Price, Michele Boeing
Description: Student may contact the instructor or department for information.

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
Description: PURPOSE: This course will introduce students to conceptual basis of statistical analysis, statistical analysis of biological data, and statistical tools in the R environment through lectures and hands-on experience in computer lab. TOPICS: include R basics, 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, and how to interpret the outcome of analysis.

**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

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**Biol 3302 Leadership For Change**

- **S-N only, 1 credit(s);**
- **Instructor:** Thul, Meaghan Miller
- **Description:** Student may contact the instructor or department for information.

**Biol 3303 Peer Leadership Practicum**

- **S-N only, 1 credit(s), max credits 2;**
- **Instructor:** Stein, Meaghan
- **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**

- **A-F only, 3 credit(s); Meets CLE req of Biological Sciences; meets CLE req of Technology and Society**
- **Instructor:** Metzger, Kelsey Jean
- **Description:** Student may contact the instructor or department for information.

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**Biol 3341 Microbiology**

- **A-F only, 2 credit(s);**
- **Instructor:** Laborde, Rebecca R
- **Description:** Student may contact the instructor or department for information.

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**Biol 3342 Microbiology and Environmental Issues**

- **A-F only, 1 credit(s);**
- **Instructor:** Laborde, Rebecca R
- **Description:** Student may contact the instructor or department for information.

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**Biol 3345 Microbiology Lab**

- **A-F only, 1 credit(s);**
- **Instructor:** Laborde, Rebecca R
- **Description:** Student may contact the instructor or department for information.

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**Biol 3407 Ecology**

- **3 credit(s); [One semester college biology], [MATH 1142 or MATH 1271 or MATH 1281 or equiv] Credit will not be granted if credit has been received for: EEB 3001;**
- **Instructor:** Lehman, Clarence L
- **Description:** Student may contact the instructor or department for information.

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**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 of college biology
Credit will not be granted if credit has been received for: BIOL 3811;
Instructor: Stephens, David William
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. 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 behavior, mating systems, altruism and other contemporary issues in behavioral evolution.
Style: 50% Lecture, 50% Laboratory.
Grading: 25% mid exam, 25% final exam, 50% 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: Silflow, Carolyn D.
Description: Student may contact the instructor or department for information.

Biol 3610 Internship: Professional Experience in Biological Sciences
S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Hanna, Kathryn L
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: This course is an honors seminar designed for juniors. Students will discuss the characteristics of effective oral and visual presentations, give a 15-minute, video-taped talk on an aspect of biology and engage in the scientific process of peer review and response to review.

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: 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 genes. In the next part of the course, 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:** See attached syllabus  
**Exam Format:** Supervised, in-person (not online) exams

### 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:** 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 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 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:** Voytas, Daniel F  
**Description:** Student may contact the instructor or department for information.

### Biol 4004 Cell Biology

3 credit(s); 4003, [BIOC 3021 or BIOC 4331], [CBS major or CSE major or grad MSB major]  
**Credit will not be granted if credit has been received for:** GCD 4005W;  
**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  
**Grading:** See attached syllabus

### Biol 4004 Cell Biology

3 credit(s); 4003, [BIOC 3021 or BIOC 4331], [CBS major or CSE major or grad MSB major]  
**Credit will not be granted if credit has been received for:** GCD 4005W;  
**Instructor:** Brambl, Robert Morgan  
**Description:** Student may contact the instructor or department for information.
Biol 4004 Cell Biology
3 credit(s); 4003, [BIOC 3021 or BIOC 4331], [CBS major or CSE major or grad MSB major] Credit will not be granted if credit has been received for: GCD 4005W;
Instructor: Petryk, Anna
Style: 80% Lecture, 20% Discussion.
Grading: 60% mid exam, 20% final exam, 20% quizzes.

Biol 4004 Cell Biology
3 credit(s); 4003, [BIOC 3021 or BIOC 4331], [CBS major or CSE major or grad MSB major] Credit will not be granted if credit has been received for: GCD 4005W;
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); 4003, [BIOC 3021 or BIOC 4331], [CBS major or CSE major or grad MSB major] Credit will not be granted if credit has been received for: GCD 4005W;
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 4364 Immunology
A-F only, 3 credit(s);
Instructor: Petzold, Andy M
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
Biol 4960H Thesis Writing in the Biological Sciences: Developing the Literature Review
A-F only, 1 credit(s);
Instructor: Schiff, Leslie Ann
Description: Biol 4960H and 4961H are the two thesis writing support courses. In the fall offering, Biol 4960H, Honors Thesis in the Biological Sciences: Developing the Literature Review, students will complete a draft of the literature review component of the thesis, and engage in peer review, response to review and revision. In the spring, Biol 4961H, Honors Thesis in the Biological Sciences: Conveying and Contextualizing Results, students will polish their literature review and complete the remaining parts of the thesis (Results, Methods, Discussion). They will also develop and present a professional research poster.

Biol 4993 Directed Studies
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Phillips, Jane 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 4994 Directed Research
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Mc Carthy, James B
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: Skubitz, Amy P
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: Brooker, Robert James
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: Engeland, William C
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: Lam, Cornelius H
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: Poynter, Jen
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: Kirkpatrick, Catherine
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: Moore, Randy
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: Pieters,Maria
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: Jagadeesan,Bharathi D
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: Subramanian PhD,Subree
Description: Student may contact the instructor or department for information.

Biol 5272 Applied Biostatistics
A-F only, 3 credit(s);One semester of college-level [[calculus or statistics or computer programming], general biology]Credit will not be granted if credit has been received for: BIOL 3272;
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 5407 Ecology
3 credit(s);[One semester college biology, [MATH 1142 or MATH 1271 or MATH 1281 or equiv], grad student] or instr consent Credit will not be granted if credit has been received for: EEB 3001;
Instructor: Lehman,Clarence L
Description: Student may contact the instructor or department for information.

Biol 5409 Evolution
3 credit(s);One semester of college biology, grad studentCredit 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
3 credit(s);One semester of college biology, grad studentCredit 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 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.

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## Biology, Society, and Environment

**BSE 3001 An Introduction to Biology, Society, and Environment**
A-F only, 2 credit(s);
Instructor: STAFF
Description: The course has several objectives: 1) to provide all BSE majors with a core experience and a forum to introduce you to the faculty, from whom you may take classes during your academic career at the University of Minnesota, and their intellectual interests; 2) to introduce you to the various educational opportunities and services offered by the University Each week there will a presentation by a faculty member followed by a question and answer period that may focus, at least in part, on the questions posed the previous week and addressed in the presentation In addition, and occasionally, there will be a short presentation by a member of the educational community describing and promoting the educational services offered a the University and the varied educational opportunities
Style: 100% Lecture.
Grading: 100% reflection paper.

**BSE 3361W Geography and Public Policy**
3 credit(s); Credit will not be granted if credit has been received for: GEOG 3361W; Meets CLE req of Writing Intensive
Instructor: Squires, Roderick H
Description: Student may contact the instructor or department for information.

**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 3996;
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.

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## Biomedical Engineering

7-105 Nils Hasselmo Hall
BMEn 1601 Biomedical Engineering Undergraduate Seminar I  
A-F only, 1 credit(s);  
Instructor: Tranquillo PhD, Robert T  
Description: Student may contact the instructor or department for information.

BMEn 2401 Programming for Biomedical Engineers  
A-F only, 2 credit(s);  
Instructor: Ippolito, Joseph  
Description: Student may contact the instructor or department for information.

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 3011 Biomechanics  
A-F only, 3 credit(s);  
Instructor: Alford, Patrick William  
Description: Student may contact the instructor or department for information.

BMEn 3011 Biomechanics  
A-F only, 3 credit(s);  
Instructor: Alford, Patrick William  
Description: Student may contact the instructor or department for information.

BMEn 3015 Biomechanics Lab  
A-F only, 1 credit(s);  
Instructor: Alford, Patrick William  
Description: Student may contact the instructor or department for information.

BMEn 3211 Bioelectricity and Bioinstrumentation  
A-F only, 3 credit(s);  
Instructor: Akkin, Taner  
Description: Student may contact the instructor or department for information.

BMEn 3211 Bioelectricity and Bioinstrumentation  
A-F only, 3 credit(s);  
Instructor: Akkin, Taner  
Description: Student may contact the instructor or department for information.

BMEn 3215 Bioelectricity and Bioinstrumentation Lab  
A-F only, 1 credit(s);  
Instructor: Akkin, Taner  
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: Akkin, Taner
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: Akkin, Taner
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: Akkin, Taner
Description: Student may contact the instructor or department for information.

BMEn 4996 Industrial Assignment II: Co-op Program
A-F only, 3 credit(s);
Instructor: Akkin, Taner
Description: Student may contact the instructor or department for information.

BMEn 5001 Advanced Biomaterials
A-F only, 3 credit(s);
Instructor: Shen, Wei
Description: Student may contact the instructor or department for information.

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: Barocas, Victor Howard
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 5401 Advanced Biomedical Imaging
A-F only, 3 credit(s);
Instructor: He, Bin
Description: Tremendous advances in medical imaging have been witnessed in the past decades. Over the past decade, functional biomedical imaging has played an important role in understanding the mechanisms of biological systems and improving the clinical diagnosis of various diseases. The goal of this course is to introduce important functional biomedical imaging modalities, and discuss the principles and applications of representative functional imaging technologies that offer high spatial resolution or temporal resolution. Our emphasis will be to develop a deep understanding and appreciation of the principles and methodological foundations of bioelectromagnetic imaging and magnetic resonance imaging. Other
functional biomedical imaging modalities will also be discussed, including ultrasound, CT, impedance imaging, optical imaging, PET/SPECT, and multimodal imaging. This is one of the core biomedical engineering graduate courses. It is designed to provide a general introduction to biomedical imaging for those who are interested, and an in-depth appreciation of the principles and methods related to bioelectromagnetic imaging and MRI. No prior knowledge with regard to physiology or imaging is required.

**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.  
**Exam Format:** Midterm: multiple choices and matching. Final: essay problems.

**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 5701 Cancer Bioengineering**  
A-F only, 3 credit(s);  
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 8311 Microfluidics in Biology and Medicine**  
A-F only, 3 credit(s);  
Instructor: Wood, David K  
**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: Netoff, Tay Ivan
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: Microfluidics in Biology and Medicine
A-F only, 3 credit(s), max credits 8;
Instructor: Wood, David K
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 Graduate Program

BICB 8401 Ethics in Bioinformatics and Computational Biology
1 credit(s);
Instructor: Van Riper, Susan Kaye
BICB 8510 Computation and Biology  
A-F only, 2 credit(s), max credits 4;  
Instructor: Van Ripper,Susan Kaye  
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: Van Ripper,Susan Kaye  
Description: Student may contact the instructor or department for information.

BICB 8960 Internship  
S-N only, 1-6 credit(s), max credits 12, 6 completions allowed;  
Instructor: Cherkesky,Vladimir S  
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.

Bioproducts and Biosystems Engineering  203 Kaufert Lab

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
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 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 2201 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. Check the public url site bbe2201.cfans.umn.edu to get more information on the course or click on the course syllabus
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 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
BBE 3023 Ecological Engineering Principles
3 credit(s);
Instructor: Clanton, Chuck

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 3201 Sustainability of Food Systems: A Life Cycle Perspective
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Mu, Dongyan
Description: Hamburger or hummus? Conventional or organic? McDonald's or Mediterranean diet? What dietary choices are the most sustainable recognizing that what we eat affects not only our health but also the environment and the well-being of those involved in food production? Feeding a world population that in the coming decades will grow in both numbers and in wealth will require that we greatly increase the amount of food we produce and be better informed of its impacts. This course examines the consequences of the global food system from a life cycle perspective. Students will explore the diversity of both the foods we eat and the means by which we grow, process, distribute, and prepare them. Students will be asked to investigate and debate current topics and controversies in food sustainability, focusing on inherent complexity and trade-offs in various dietary options and the means of producing them. Case studies, readings, and discussion topics will be chosen to emphasize that responsible decisions concerning what we eat can only be made when we consider entire food supply chains and their full set of economic, environmental, and social consequences.

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 Industry Assignment
A-F only, 1 credit(s);
Instructor: STAFF
Description: Industrial work assignment in program related to cooperative education. 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 4401 Bioproducts Engineering
A-F only, 3 credit(s);
Instructor: Wang, Ping
Description: Basic principles of unit operations and their applications to bio-based products manufacturing - chemical reaction engineering, solid-liquid separation processes, solid-solid separation processes, evaporation, distillation, combustion, gasification, drying, etc. Applying unit operations and material properties to design processes and to manufacture conventional and emerging bio-based products including biofuels, bioenergy, and bio-plastics.

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: Student may contact the instructor or department for information.

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, 5% Discussion, 5% Web Based.

**Grading:** 10% special projects, 30% problem solving. Three exams -- 20% each.

**Exam Format:** Short answers and calculations.

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**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.

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**BBE 4414 Advanced Residential Building Science**

4 credit(s); 2001 Credit will not be granted if credit has been received for: BBE 5414;

**Instructor:** Huelman, Patrick Henry

**Description:** This course is intended to be an advanced course. Students are expected to be fully prepared and engaged in the content and its application. Approximately 80% of the course will be heavily structured to cover the critical content, but some time will be left for discussion. The course will give the student an excellent grasp of the key building science principles and the ability to put these principles to work in both a qualitative and quantitative manner to resolve common energy, moisture, and indoor air quality issues in residential buildings.

**Style:** 80% Lecture, 15% Discussion, 5% Student Presentation.

**Grading:** 60% mid exam, 15% written homework, 25% in-class presentation. Grades based off of percentages

**Exam Format:** Short answers and problems

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**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.

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**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/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.

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**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.

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**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 may contact the instructor or department for information.

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 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: Wang,Ping
Description: Basic principles of unit operations and their applications to bio-based products manufacturing - chemical reaction engineering, solid-liquid separation processes, solid-solid separation processes, evaporation, distillation, combustion, gasification, drying, etc. Applying unit operations and material properties to design processes and to manufacture conventional and emerging bio-based products including biofuels, bioenergy, and bio-plastics.

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: Student may contact the instructor or department for information.

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, 5% Discussion, 5% Web Based.
Grading: 16% special projects, 24% 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 5414 Advanced Residential Building Science
4 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: BBE 4414;
Instructor: Huelman,Patrick Henry
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: Sarkinen, Simo
Description: Student may contact the instructor or department for information.

BBE 8013 Parameter Estimation in Biosystems and Agricultural Engineering
A-F only, 3 credit(s);
Instructor: Wilson, Bruce Nord
Description: An overview of fundamental statistical concepts related to parameter estimation is given first. This includes the central limit theorem, unbiased estimators, confidence intervals and hypothesis testing of sample means, and analysis of variance. Optimization and statistical concepts necessary to obtain a “good” set of parameters for linear regression equations is discussed. Ordinary, weighted and generalized least square methods are discussed. Concepts for nonlinear regression are briefly introduced. BBE 8013 also covers material to develop an understanding of and use of statistical concepts important in the design of experiments.
Style: 100% Lecture.
Grading: 15% final exam, 85% problem solving.
Exam Format: Take home final

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.

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), max credits 3, 3 completions allowed;**
- **Instructor:** Zhang, Xiaoji
- **Description:** BA 3999 is a one-credit independent study course for students that want/need to gain a credit with an internship. You can take it during your internship or the semester right after it is over. It 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, please fill out the attached form, have your supervisor (and yourself) sign it, and turn it in at UBCC. You will then receive permission to register. International students need to go to ISSS to get CPT paperwork before registering for the class.

**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:** Houston, Michael J
- **Description:** Student may contact the instructor or department for information.

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

**BLaw 6158 The Law of Contracts and Agency**
- **A-F only, 4 credit(s);**
- **Instructor:** Kramer, Jack
- **Description:** Student may contact the instructor or department for information.

**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: Sancomb-Moran, Mary Beth
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: Sancomb-Moran, Mary Beth
Description: Student may contact the instructor or department for information.

CLI 1393 Directed Study
1-3 credit(s), max credits 6;
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

CLI 1393 Directed Study
1-3 credit(s), max credits 6;
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: Anderson, Justin Ryan
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: Menze, Dauline M
Description: Student may contact the instructor or department for information.

CLI 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Eiden, Steph
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 1711 University Experience I
S-N only, 1 credit(s);
Instructor: Taylor, Marquis Demetrious
Description: Student may contact the instructor or department for information.

CLI 2522 Community Collaboratory
A-F only, 3 credit(s);
Instructor: Henderson Vazquez, Teresa A
Description: Student may contact the instructor or department for information.

CLI 2711 Career Exploration I
S-N only, 1 credit(s);
Instructor: Casper, Jenny
Description: Student may contact the instructor or department for information.

CLI 2711 Career Exploration I
S-N only, 1 credit(s);
Instructor: Telander, Parry J
Description: Student may contact the instructor or department for information.

CLI 2711 Career Exploration I
S-N only, 1 credit(s);
Instructor: Puetz, Teresa Lynn
Description: Student may contact the instructor or department for information.

CLI 2711 Career Exploration I
S-N only, 1 credit(s);
Instructor: Sancomb-Moran, Mary Beth
Description: Student may contact the instructor or department for information.

CLI 2711 Career Exploration I
S-N only, 1 credit(s);
Instructor: Walker, Laura
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 6;
Instructor: Bruenger, Aaron Michael
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 6;
Instructor: Dingel, Molly J.
Description: Student may contact the instructor or department for information.

CLI 3393 Directed Study
1-3 credit(s), max credits 6;
Instructor: Kostko, Aaron Thomas
Description: Student may contact the instructor or department for information.

CLI 3394 Directed Research
1-6 credit(s), max credits 6, 4 completions 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, 4 completions allowed;
Instructor: Mondy, Brian J
Description: Student may contact the instructor or department for information.

CLI 3394 Directed Research
1-6 credit(s), max credits 6, 4 completions allowed;
Instructor: Prat-Resina, Xavier
Description: Student may contact the instructor or department for information.

CLI 3496 Internship: Professional Experience
CLI 3496 Internship: Professional Experience
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Taniguchi, Yuko
Description: Student may contact the instructor or department for information.

CLI 3711 Career Preparation: 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 Career Preparation: Social Media in Healthcare
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Furness, Ryan C
Description: Student may contact the instructor or department for information.

CLI 3711 Career Preparation: 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 Career Preparation: 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 Career Preparation: 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 Career Preparation: 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 Capstone Proposal Writing
S-N only, 1 credit(s);
Instructor: Taniguchi, Yuko
Description: Student may contact the instructor or department for information.

CLI 4393 Capstone Directed Study
S-N only, 1-3 credit(s), max credits 6;
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: 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 24, 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 24, 3 completions allowed;
Instructor: Mondy, Brian 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 24, 3 completions allowed;
Instructor: Metzger, Kelsey Jean
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 24, 3 completions allowed;
Instructor: Petzold, Andy M
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 24, 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 24, 3 completions allowed;
Instructor: Larsen, Peter Lawrence
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 24, 3 completions allowed;
Instructor: Nichols, Marcia Dawn
Description: Student may contact the instructor or department for information.

CLI 4696 Capstone Research Experience
S-N only, 1-12 credit(s), max credits 24, 3 completions allowed;
Instructor: Brewer, Cameron David
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Furness, Ryan C
Description: Student may contact the instructor or department for information.

CLI 4712 Capstone Reflections II
S-N only, 1 credit(s);
Instructor: Taniguchi, Yuko
Description: Student may contact the instructor or department for information.

CLI 4712 Capstone Reflections II
S-N only, 1 credit(s);
Instructor: Hegland, Jennifer Jean
Description: Student may contact the instructor or department for information.

CLI 4713 Capstone Reflections I and II
S-N only, 2 credit(s);
Instructor: Furness, Ryan C
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.
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

CSpH 3000 Topics in Integrative Health: Living on Purpose: Explore Self, Purpose, Comm.
2 credit(s), max credits 16, 4 completions allowed;
Instructor: Melin, LeeAnn Jessen
Description: Student may contact the instructor or department for information.

CSpH 3000 Topics in Integrative Health: Hatha Yoga Anatomy and Physiology
0 credit(s), max credits 16, 4 completions allowed;
Instructor: Schuver, Katie Jo
Description: Student may contact the instructor or department for information.

CSpH 3001 Introduction to Integrative Healing
3 credit(s);
Instructor: Brady, Linda J
Description: Student may contact the instructor or department for information.

CSpH 3101 Creating Ecosystems of Well-Being
2 credit(s);
Instructor: Hathaway, Kate M
Description: Student may contact the instructor or department for information.

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.

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 Integrative Therapies and Healing Practices: Spiritual Aspects of Palliative Care**

*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 5000 Explorations in Integrative Therapies and Healing Practices: Horse as Teacher: Equine Assisted Therapies**

*3 credit(s), max credits 12, 4 completions allowed;*

**Instructor:** Larson, Jean Marie

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

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**CSpH 5000 Explorations in Integrative Therapies and Healing Practices: Fundamentals of Lifestyle Medicine**

*2 credit(s), max credits 12, 4 completions allowed;*

**Instructor:** Litchy, Andrew Paul

**Description:** This course provides a foundation in the theory and clinical application of lifestyle medicine. Lifestyle medicine aims to address the behavioral and lifestyle bases of common illnesses through health promoting activities and reducing harmful behaviors. In this course, we will explore optimal nutrition, lifestyle, exercise, and attitude. We will examine the emerging evidence base of lifestyle medicine and how it relates to health and disease prevention. Participants will learn to assess patients by taking a focused history/assessment, administering and interpreting surveys, and understanding common laboratory findings. This course will introduce students to information needed to practice in clinical or professional settings and communicate effectively with other healthcare providers.

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**CSpH 5101 Introduction to Integrative Healing Practices**

*3 credit(s);*

**Instructor:** Culliton, Patricia D

**Description:** Cultural contexts of healing traditions. Complementary therapies presented by practitioners, including traditional Chinese medicine, meditation, mind-body healing, spiritual practices, energy healing, naturopathy, herbalism, movement therapies, homeopathy, manual therapies, and nutrition.

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**CSpH 5102 Art of Healing: Self as Healer**

*1 credit(s);*

**Instructor:** Kubes, Laurie Frances

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

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**CSpH 5111 Ways of Thinking about Health**

*S-N only, 2 credit(s);*

**Instructor:** Hassel, Craig Alan

**Description:** "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.

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**CSpH 5211 Peacemaking and Spirituality: A Journey Toward Healing and Strength**
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: 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: This section of CSPH 5226 is an independent study designed for graduate study of MBSR techniques and their efficacy in clinical practice. Please contact instructor for more information.

CSpH 5313 Acupressure
1 credit(s);
Instructor: Culliton, Patricia D

CSpH 5315 Traditional Tibetan Medicine: Ethics, Spirituality, and Healing
2 credit(s);
Instructor: Cameron, Robin Lynn
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 is a prerequisite for CSPH 5318. For information, contact Dr. Cameron: <camer008@umn.edu>

Style: 35% Lecture, 35% Film/Video, 30% Discussion. Students do their work through the course web site. They can access the web site 24/7, except when the U is conducting maintenance. For info, contact Dr. Cameron: <camer008@umn.edu>
Grading: 50% reports/papers, 20% special projects, 30% journal. Students may take the course A-F, S-N, or Audit. For info, contact Dr. Cameron: <camer008@umn.edu>
Exam Format: No exams.

CSpH 5331 Foundations of Shamanism and Shamanic Healing
S-N only, 2 credit(s);
Instructor: Lawson, 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, properly 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: Manvikar, Asavari
Description: This course will introduce students to the basic principles of Ayurveda, the Science of self-healing. It will also cover evidence based information available on Ayurvedic Medicine. Ayurveda emphasizes balance of body, mind and spirit to achieve the optimum health through natural means. Course content will include Ayurvedic constitutional types and practices including food, herbal medicine, detoxification and massage. Students will examine how Ayurvedic principles and practices can be integrated into personal plans for health and well-being and how Ayurveda is being integrated into healthcare settings.
Style: 60% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 10% Student Presentation. Thursday evenings starting from Sept 5th 4 to 8:30 pm 7 weeks
Grading: 30% final exam, 30% journal, 40% in-class presentation. The purpose of assignments and their grading is to review and synthesize the course material, develop critical thinking, enhance learning, explore various resources to understand the topics in depth and acquire more knowledge.
Exam Format: Short answer questions based on understanding of basic principles.

CSpH 5421 Botanical Medicines in Integrative Healthcare
3 credit(s);
Instructor: McKenna PhD, Dennis Jon
Description: The growing interest in complementary and alternative medicine (CAM) by medical practitioners has been accompanied by an information deficit. Many practitioners are unfamiliar with complementary therapies, and know little about their therapeutic rationale, efficacy (or lack thereof), potential applications, or potential hazards, even though their patients may utilize such therapies. This is particularly the case when it comes to the use of botanical medicines and dietary supplements. Botanical dietary supplements are widely sold, promoted and denounced in the media, and increasingly popular, yet many health care providers are uninformed about them. Often, practitioners' lack of knowledge makes it difficult to advise patients regarding their uses, and possible safety concerns, and patients use botanical supplements without the knowledge of their health care providers. Botanical medicines may be viable alternatives to conventional pharmaceuticals, yet many practitioners are unaware of these alternatives or reluctant to advise their patients on their use. This course is intended to provide consumers and patients with a knowledge base that will enable them to make informed decisions about whether and how to use botanical supplements, and how to engage in productive discussions with their health care providers regarding this use. The course is also designed to provide health care professionals with the knowledge base needed to provide informed advice to their patients on the appropriate uses of supplements, and how to integrate them into their own practice should they wish to do so. This course will focus primarily on the most popular and widely used botanical medicines. The information will be presented from a biomedical perspective, although discussions of alternative therapeutic systems, such as Traditional Chinese Medicine (TCM) or Ayurvedic Medicine, will also be included to provide balance. Students will be introduced to information resources pertinent to the use of botanical medicines, and there will be discussion of how this topic is treated in both the scientific literature and the popular press. The botanical characteristics, traditional uses, and chemical properties of the active constituents will also be covered. Therapeutic applications, appropriate uses, potential hazards, dosage, drug interactions and other safety considerations, will be addressed. Quality control issues in the manufacture of botanical supplements, and the regulatory environment governing their manufacture and sale, will be addressed. The applications of particular botanical medicines will be discussed and related to required and recommended readings and online resources; emphasis will be placed on information derived from clinical and pre-clinical studies published in current scientific literature. The information presented will be organized according to bodily systems and processes affected, e.g. the immune system, the cardiovascular system, etc.
Style: 100% Web Based. Class is entirely online for Fall 2013
Grading: 10% final exam, 25% special projects, 10% quizzes, 25% journal, 25% class participation, 5% other evaluation.
Exam Format: All quizzes will be online.

CSpH 5503 Aromatherapy Fundamentals
1 credit(s);
Instructor: Halcon PhD, Linda Luciente
Description: Student may contact the instructor or department for information.

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:** Experiential training in the cultivation of happiness, emotional health, and healing for multi-disciplinary professions. Ancient/contemporary, eastern/western approaches. How to increase positive emotions and mind states. Meditation, integrative approaches. Case examples.

**CSpH 5605 Movement and Music for Well-being and Healing**  
2 credit(s);  
**Instructor:** Heiderscheit PhD, Annie Lynne  

**CSpH 5701 Fundamentals of Health Coaching I**  
A-F only, 4 credit(s);  
**Instructor:** Olson, Deborah Collins  
**Description:** Please contact department or instructor for further information. There will be a $300 course fee associated with this course.

**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:** Stuckey, Claire Madelyn  
**Description:** Case-based. Students identify/utilize broad-based resources in guiding/supporting individual clients' cases. Application of theory/process from earlier courses. Ethical issues, professional boundaries, referral processes, client selection.

**CSpH 5703 Advanced Health Coaching Practicum**  
A-F only, 3 credit(s);  
**Instructor:** Schultz, Cindy  
**Description:** Case-based. Students identify/utilize broad-based resources in guiding/supporting individual clients' cases. Application of theory/process from earlier courses. Ethical issues, professional boundaries, referral processes, client selection.
CSpH 5704 Business of Health Coaching
   A-F only, 2 credit(s);
   Instructor: Rae, Michele
   Description: Student may contact the instructor or department for information.

CSpH 5711 Optimal Healing Environments
   3 credit(s);
   Instructor: Zborowsky, Theresa Lynn
   Description: Development/implementation of optimal healing environments. Evidence base supporting structural, architectural, human, and care processes. Emphasizes identifying models of optimal healing environments and leadership strategies that support diffusion of innovation.

CSpH 8191 Independent Study in Integrative 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 Integrative 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 Integrative 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 Integrative 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
   Instructor: Hackel, Benjamin J.
   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: Dorfman, Kevin
   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
   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
ChEn 3101 Chemical Engineering Thermodynamics
A-F only, 4 credit(s);
Instructor: Morse, David Clark
Description: Student may contact the instructor or department for information.

ChEn 3701 Introduction to Biomolecular Engineering
A-F only, 3 credit(s);
Instructor: Hu, Wei-Shou
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: Caretta, Raul Alberto
Description: Student may contact the instructor or department for information.

ChEn 4501W Chemical Engineering Design I
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Tsapatsis, Michael
Description: Student may contact the instructor or department for information.

ChEn 4501W Chemical Engineering Design I
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Tsapatsis, Michael
Description: Student may contact the instructor or department for information.

ChEn 4593 Directed study
OPT No Aud, 1-4 credit(s), max credits 6, 3 completions allowed;
Instructor: STAFF
Description: Directed study under faculty supervision. Student must meet with faculty supervisor before registering to get permission to pursue directed study, arrange study project, grading option, number of credits, and final report requirements.

ChEn 4594 Directed Research
OPT No Aud, 1-4 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 get permission to pursue directed research, arrange research project, number of credits, grading option, and final report requirements.

ChEn 4594H Directed Research - Honors
A-F only, 1-4 credit(s), max credits 6, 3 completions allowed;
Instructor: Prince, Julie K.
Description: Student may contact the instructor or department for information.

ChEn 4601 Process Control
A-F only, 3 credit(s);
Instructor: Cussler Jr, Edward L
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 8201;
Instructor: Daoutidis, Prodromos
Description: Student may contact the instructor or department for information.

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 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: Ericksen, 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: Kokkoli, Efie
Description: Student may contact the instructor or department for information.

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
Chemical Physics  139 Smith Hall

ChPh 8081 M.S. Plan B Project I
A-F only, 4 credit(s);
Instructor: Thao,Nancy
Description: Student may contact the instructor or department for information.

ChPh 8082 M.S. Plan B Project II
A-F only, 4 credit(s);
Instructor: Thao,Nancy
Description: Student may contact the instructor or department for information.

ChPh 8601 Seminar: Modern Problems in Chemical Physics
S-N only, 1 credit(s), max credits 2;
Instructor: Massari,Aaron
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 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: Salmon, Debra J
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: Lu, Connie C
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 1231 Organic Chemistry I  
A-F only, 4 credit(s); Meets CLE req of Physical Sciences  
Instructor: Butani, Deepali  
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: Haynes, Christy L  
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: 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: Bowser, Michael  
Description: Student may contact the instructor or department for information.
Chem 1905 Freshman Seminar
A-F only, 3 credit(s), max credits 3, 1 completion allowed;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

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 Midterm 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 2304 Organic Chemistry II for the Life Sciences
3 credit(s); Grade of at least C- in 2301; designed for life sciences majors Credit will not be granted if credit has been received for: CHEM 2302;
Instructor: Distefano, Mark Dewey
Description: Student may contact the instructor or department for information.

Chem 2311 Organic Lab
4 credit(s);
Instructor: Wissinger, Jane E.
Description: Student may contact the instructor or department for information.
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’s) 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: Honors organic chemistry laboratory to take the place of 2311 and 4311.

Chem 2331 General Chemistry I  
A-F only, 4 credit(s);  
Instructor: Prat-Resina, Xavier  
Description: Student may contact the instructor or department for information.

Chem 2331 General Chemistry I  
A-F only, 4 credit(s);  
Instructor: Larsen, Peter Lawrence  
Description: Student may contact the instructor or department for information.

Chem 2331 General Chemistry I  
A-F only, 4 credit(s);  
Instructor: Bampoh, Victoria Naa Kwale  
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 1072H, UHP student  
Credit will not be granted if credit has been received for: CHEM 2301;  
Instructor: Taton, T. Andrew  
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 (Poly(lactic 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

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**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.

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**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.

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**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.

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**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.

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**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.

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**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.

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**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.

**Style:** 10% Lecture, 90% Laboratory.

**Grading:** 100% laboratory evaluation.

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**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: Veglia,Gianluigi
Description: What is a gas?; equations of state; the ideal-gas equation; the virial expansion; other equations of state. Heat and work; the First Law; reversible and non-reversible processes; heat capacity; enthalpy. Spontaneous processes; entropy; the Second Law. Entropy as a function of temperature; the Third Law; how entropy depends on molecular mass and structure; standard entropy values. Criteria for spontaneity in non-isolated systems; the Helmholtz and Gibbs functions; Maxwell relations; natural independent variables; calculations involving real and ideal gases; the standard state of a gas; fugacity. Phase diagrams; Gibbs function and the phase diagram of a substance. Chemical potential; Clausius-Clapeyron equation. Liquid solutions; partial molar quantities; the Gibbs-Duhem equation; phase equilibria in binary systems; ideal and non-ideal solutions; activity and the activity coefficient. Solid-liquid solutions; activity of a non-volatile solute; colligative properties; Chemical equilibrium; the equilibrium constant; the van't Hoff equation; using activities in equilibrium calculations. The relationship between temperature and mean kinetic energy in a gas; the Maxwell-Boltzmann distribution; collisions; cross-sections; collision rate and reaction rate. Rate laws; the order of a reaction; reversible reactions; relaxation methods; temperature dependence of the rate constant.
Style: 100% Lecture.
Grading: 54% mid exam, 28% final exam, 18% quizzes.
Exam Format: Problems

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 4725 Organometallic Chemistry
3 credit(s);
Instructor: Tonks, Ian
Description: Student may contact the instructor or department for information.

Chem 8011 Mechanisms of Chemical Reactions
4 credit(s);
Instructor: Mann, Kent R
Description: Student may contact the instructor or department for information.

Chem 8025 Introduction to Graduate Research
A-F only, 1-2 credit(s), max credits 2;
Instructor: Thao, Nancy
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: Frontiera, Renee R
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: Harned, Andrew Michael
Description: Student may contact the instructor or department for information.

Chem 8411 Introduction to Chemical Biology
4 credit(s);
Chem 8541 Dynamics
4 credit(s); Undergrad physical chem course
Credit 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: Johns, James
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.

Chem 8725 Organometallic Chemistry
4 credit(s);
Instructor: Tonks, Ian
Description: Student may contact the instructor or department for information.

Chicano Studies

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: Duenes, Michael
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 at community site

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: Student may contact the instructor or department for information.

Chic 1905 Freshman Seminar: The Politics and Performance of Salsa
A-F only, 3 credit(s);
Instructor: Garcia, Cindy
Description: Over the last few decades salsa has surged across borders of nation, race, and class and has become the dance through which Latinas/os are identified on a global scale. This course considers salsa as Latinidad in motion: a marker of social class and ethnic/national/Pan-Latino identity, a sign of cultural solidarity and/or divisiveness, and as a commodity within the context of globalization. Class time is evenly devoted to learning beginning dance techniques of salsa (such as partnering, rhythm, and improvisation) and to the critical discussion of readings and movies. We will develop skills that will enable us to closely analyze dancing bodies, the politics of Latinidad, and the social and cultural significations of the different ways people dance salsa. We will also address salsa's relationship with other social dances associated with Latinidad, such as cha cha cha, merengue, and cumbia as well as the work of Chicano choreographer Joel Valentin-Martinez. Come prepared to read, write, dance, and discuss course topics.
Style: 10% Lecture, 10% Film/Video, 15% Discussion, 10% Small Group Activities, 5% Student Presentation, 50% Studio.
Grading: 20% mid exam, 20% reports/papers, 20% special projects, 15% in-class presentation, 25% class participation.

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 3221 Introduction to Chicana/o Cultural Studies: Barrio Culture and the Aesthetics of Everyday Life
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: This class takes a cultural studies approach to investigating the aesthetic dimensions of experience that inform and are informed by the dynamic relationship between culture, class, ethnicity, and power. The goals of this class are: 1) to identify the prevailing paradigms of cultural production among people of Mexican descent in the United States; 2) to assess the relationship between these forms and the spiritual and material conditions of the lives of Chicanas/os; 3) to identify how everyday ways of seeing, thinking, knowing, and being are an integral part of the art of living and are encoded in language, style, speech, and social relationships.

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: Xochimeh, Tlahtoki
Description: Why do many Mexican-descent people self-identify as Chicanas/os? What is folklore? How does Chicana/o folklore reflect the ways in which Chicanas/os see and understand the world? In what ways has Chicana/o folklore influenced mainstream societies? When is Dia de los Muertos (Day of the Dead) and why is it important to Chicana/o peoples? This course answers these questions and more to introduce you to the folklore of Greater Mexico, or otherwise known as Chicana/o folklore. Throughout the class, we will critically examine Chicana/o cultures and ideologies, explore the diverse forms of Chicana/o folklore, and identify the contemporary relevance of discussing these topics. We will employ a variety of sources to aid our analysis: guest lectures, movies, writings by Chicanas/os, etc. After the semester, you will have a firm grasp of Chicana/o folklore, in addition to a better understanding of how the course material relates to your daily life. This course meets the Liberal Education Requirements in Diversity and Social Justice in the U.S. (theme). Class Time: 25% Lecture, 60% Discussion. video clips Work Load: response papers and final paper Grade: 50% reports/papers, 20% class participation, 30% other evaluation. final paper Instructor: Xochimeh, Tlahtoki

Chic 3425 History of Modern Mexico
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 3425
Instructor: McNamara, Patrick J
Description: Student may contact the instructor or department for information.

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: Covarrubias, Alexandra Mendoza
Description: Students will be introduced students to a variety of genres within Chicana/o literature. Emphasis will be placed on the use and function of feminine archetypes within the canon of Chicana/o literature. Students will be exposed to a variety of texts and writing styles and will learn to identify the themes and aesthetics that characterize Chicana/o literature in its many forms as well as understand the significance of the counter-narratives that Chicana/o literature presents. We will approach the readings from an intersectional perspective; analyzing works for the ways in which they confront not only race, class, sexuality and gender issues, but issues of transnationalism and globalization as well.
Style: 25% Lecture, 60% Discussion, 15% Student Presentation.
Grading: 15% reports/papers, 20% quizzes, 15% journal, 30% reflection paper, 10% in-class presentation, 10% class participation.

Chic 3752 Chicanas and Chicanos in Contemporary Society
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
**Description:** Chicana and Chicano Contemporary Society will focus on the current social, cultural and political issues effecting Chicana/o and Latina/o communities. We will direct our attention to five overarching themes: 1) Education, 2) Immigration 3) Labor and Economics, 4) Environmental Justice, and 5) Reproductive Rights and Health Care. The course seeks to address national discourses, as well as localized issues that are specific to the Midwest Chicana/o experience. Taking seriously the claims made by Chicana feminists and social identity theory scholars, we will approach the course through an intersectionality lens, taking into account how race, class, genders, sexualities, and other identities are formed and impact Chicana/os consciousness and lived experiences. Course materials will draw from social science research, literature (novels, poetry, etc.), films, and performance/visual art.

**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 Social 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 3993 Directed Studies**
1-9 credit(s), max credits 16, 16 completions allowed;
**Instructor:** Torres PhD, Eden E.
**Description:** Student may contact the instructor or department for information.

**Chic 4901W Senior Paper**
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
**Instructor:** Torres PhD, Eden E.
**Description:** Student may contact the instructor or department for information.

**Child Psychology 104 Child Development**

**CPsy 1904 Freshman Seminar: Global Perspectives**
A-F only, 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); 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: See attached syllabus
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: Elieff, Chryle Ann
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: Allen, Timothy A
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: Stellern, Sarah Ann
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: Cole, Caitlin Ann
Description: Student may contact the instructor or department for information.

CPsy 4302 Infant Development
A-F only, 3 credit(s);
Instructor: Yaylaci, Fatima Tuba
Description: Student may contact the instructor or department for information.

CPsy 4303 Adolescent Psychology
A-F only, 3 credit(s);
Instructor: Warren, Henriette
Description: This undergraduate course examines psychological development during adolescence. The major goals include 1) gaining an understanding of the major theoretical perspectives on adolescent development, 2) identifying biological, cognitive and social processes of adolescence and the ways in which they interact to influence development, 3) recognizing the role that contextual factors play in shaping adolescent experiences, and 4) gaining familiarity with prominent research methods used in conducting studies of adolescent development. Class sessions will include a mixture of lectures, discussion, videos, and group activities.
Style: 80% Lecture, 10% Film/Video, 10% Discussion.
Grading: 40% mid exam, 25% final exam, 30% reports/papers, 5% class participation.
Exam Format: multiple choice

CPsy 4303 Adolescent Psychology
A-F only, 3 credit(s);
Instructor: McCormick, Christopher M
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. Overview of development in the second decade of life. Interactions of adolescents with family, school, and society.
Style: Online with in-person handwritten exams
Grading: 40% mid exam, 25% final exam, 30% reports/papers, 5% quizzes. - 9 discussions - 1 film analysis essay (20%)
Exam Format: In-person, proctored exams

CPsy 4310 Special Topics in Child Development: Development Across Cultures
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Hecht, Kathryn F
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: Karatekin, Canan
CPsy 4331 Social and Personality Development
A-F only, 3 credit(s);
Instructor: Sapienza,Julianna Karlen
Description: Student may contact the instructor or department for information.

CPsy 4331 Social and Personality Development
A-F only, 3 credit(s);
Instructor: Shlafer,Rebecca J
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 4336W Development and Interpersonal Relations
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Roisman,Glenn I
Description: Student may contact the instructor or department for information.

CPsy 4343 Cognitive Development
A-F only, 3 credit(s);
Instructor: Zelazo,Philip David
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: Yussen,Steve
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: Maratsos, 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: Elieff, Chryle Ann
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: 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: Yusen, 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: Shlafer, Rebecca 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 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: Elison, Jed T.  
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, 2-4 credit(s), max credits 4, 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 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: Schultz, Susan Kristine  
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: Carlson, Elizabeth Anne  
Description: Student may contact the instructor or department for information.

CPsy 8301 Developmental Psychology: Cognitive Processes  
4 credit(s);  
Instructor: Carlson, Stephanie M  
Description: Student may contact the instructor or department for information.

CPsy 8311 Landmark Issues and Great Controversies in Child Development  
S-N only, 2 credit(s);  
Instructor: Collins, W Andrew  
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 8360 Special Topics in Developmental Psychology: Developmental Neurobiology of Stress and Emotion  
3 credit(s), max credits 21, 7 completions allowed;  
Instructor: Gunnar PhD, Megan R  
Description: Student may contact the instructor or department for information.

CPsy 8660 Advanced Developmental Psychology: Pre- and Postnatal Human Brain Development  
2-3 credit(s), max credits 21, 7 completions allowed;  
Instructor: Thomas, Kathleen M  
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: Maratsos, 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: Maratsos, 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: 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: 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: 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.
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 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: Liu, Jiang
Description: Student may contact the instructor or department for information.

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

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: Wei, Pei-Cheng
Description: Student may contact the instructor or department for information.

Chn 3201 Chinese Calligraphy
2 credit(s);
Instructor: Zhang, Hong
Description: Student may contact the instructor or department for information.

Chn 3290 Chinese Language Teaching Tutorial
S-N only, 1 credit(s), max credits 2;
Instructor: Wang, Ling
Description: Student may contact the instructor or department for information.

Chn 4001 Beginning Modern Chinese
3 credit(s); Grad student Credit 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 student Credit 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 student Credit 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 4003 Intermediate Modern Chinese
3 credit(s); 4002, grad student Credit will not be granted if credit has been received for: CHN 3021;
Instructor: Liu, Jiang
Description: Student may contact the instructor or department for information.

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, 1012 Credit 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
Chn 4007 Advanced Modern Chinese
3 credit(s); 4004, grad student Credit 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 4007 Advanced Modern Chinese
3 credit(s); 4040, grad student Credit will not be granted if credit has been received for: CHN 3031;
Instructor: Wei, Pei-Cheng
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 Among modern Chinese thinkers, Lu Xun has the greatest insight in and is the most critical of traditional Chinese institution, society, and culture. If you can understand Lu Xun, you will have a good understanding of traditional and modern Chinese society and culture, as well as Chinese intellectuals? urgent sense of pushing China into the modern world. Naturally, reading Lu Xun is critical in understanding China?s New Cultural Movement in the early twentieth-century, a great challenge for many Western sinologists. In the spring semester, we will study articles, short stories, and novelettes by Lu Xun and Hu Shi, another giant in modern China?s intellectual history. This will also help students in understanding other important writers of the New Cultural Movement. The works we will study includes Lu Xun and Hu Shi?s insights in Chinese people?s characteristics, the problems of the institution, age and gender oppression, and the cause of China?s backwardness. 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 and video. Work load: 10-15 pages of reading per week, 5 pages of writing per semester, 2 exams, reading presentation, and a final essay. Grade: 15% class participation, 15% quizzes, 10% reading presentation, 20% midterm exam, 20% final exam, 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: McGrath, Jason
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 students 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: Bridell,James M
Description: Student may contact the instructor or department for information.

CE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Detournay,Emmanuel Michel
Description: Student may contact the instructor or department for information.

CE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Detournay,Emmanuel Michel
Description: Student may contact the instructor or department for information.

CE 3401 Linear Structural Analysis
A-F only, 3 credit(s);
Instructor: Stolarski,Henryk Konstanty

CE 3402W Civil Engineering Materials
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Rendahl PhD, Merry
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 3501 Environmental Engineering
A-F only, 3 credit(s); Meets CLE req of Environment
Instructor: Surdo, Erin Mehleis
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 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 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: Rendahl PhD, Merry
Description: Student may contact the instructor or department for information.
CE 4190 Engineering Co-op Assignment
S-N only, 2-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Labuz, Joseph F
Description: Student may contact the instructor or department for information.

CE 4251 Pavement Analysis, Design, and Rehabilitation
4 credit(s);
Instructor: Dai, Shongtao
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: 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 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: Hozalski PhD, Raymond M
Description: Student may contact the instructor or department for information.
CE 4512 Open Channel Hydraulics
A-F only, 4 credit(s);
Instructor: Guala, Michele
Description: Student may contact the instructor or department for information.

CE 4561 Solid Hazardous Wastes
3 credit(s);
Instructor: Surdo, Erin Mehleis
Description: Student may contact the instructor or department for information.

CE 5180 Special Topics: Wnd Energy Essentials
A-F only, 2 credit(s), max credits 4, 3 completions allowed;
Instructor: Torrey, Ethan R
Description: Student may contact the instructor or department for information.

CE 5212 Transportation Policy, Planning, and Deployment
4 credit(s); 3201 or equiv Credit 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 5213 Transit Planning and Management
A-F only, 3 credit(s);
Instructor: Cao, Jason

CE 5214 Transportation Systems Analysis
4 credit(s);
Instructor: Liu, Henry
Description: Student may contact the instructor or department for information.

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: Ballarini PhD, Roberto
Description: Student may contact the instructor or department for information.

CE 5414 Prestressed Concrete Design
A-F only, 3 credit(s);
Instructor: French, Catherine Ellen
Description: Student may contact the instructor or department for information.

CE 5541 Environmental Water Chemistry
CE 5543 Introductory Environmental Fluid Mechanics
A-F only, 4 credit(s);
Instructor: Hondzo, Miki
Description: Student may contact the instructor or department for information.

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 5571 Design for Sustainable Development: Innovate
A-F only, 3-4 credit(s), max credits 8;
Instructor: Rose, Fred Anthony
Description: Student may contact the instructor or department for information.

CE 8200 Seminar: Transportation
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Davis, Gary Arnold
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: Guzina, Bojan B
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: French, Catherine Ellen
Description: Student may contact the instructor or department for information.

CE 8421 Structural Dynamics
A-F only, 3 credit(s);
Instructor: Linderman, Lauren Elizabeth
Description: Student may contact the instructor or department for information.

CE 8422 Earthquake Engineering
A-F only, 3 credit(s);
Instructor: Schultz, Arturo Ernest
Description: Student may contact the instructor or department for information.

CE 8451 Behavior of Reinforced Concrete Structures
A-F only, 3 credit(s);
Instructor: French, Catherine Ellen
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: Hozalski PhD, Raymond M
Description: Student may contact the instructor or department for information.

CE 8506 Stochastic Hydrology
A-F only, 4 credit(s);
Instructor: Foufoula, Efi
Description: Student may contact the instructor or department for information.
CE 8542 Chemistry of Organic Pollutants in Environmental Systems  
A-F only, 3 credit(s);  
Instructor: Arnold,Bill  
Description: Student may contact the instructor or department for information.

CE 8551 Environmental Microbiology: Molecular Theory and Methods  
A-F only, 4 credit(s);  
Instructor: LaPara,Timothy M  
Description: Student may contact the instructor or department for information.

CE 8552 Environmental Microbiology: Molecular Theory and Methods  
A-F only, 4 credit(s);  
Instructor: LaPara,Timothy M  
Description: Student may contact the instructor or department for information.

CE 8602 Stream Restoration Practice  
S-N only, 2 credit(s);8601 or Geo 8601Credit will not be granted if credit has been received for: ESCI 8602;  
Instructor: Voller,Vaughan Richard  
Description: Student may contact the instructor or department for information.

Classical Civilization  
245 Nicholson Hall

ClCv 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.

ClCv 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: See attached syllabus
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
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 1046 Technical Terminology for the Health Professions
3 credit(s);
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
Grading: See attached syllabus

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: Levinson PhD, Bernard M.
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. Consequently, the course does not address personal religious belief or matters of faith. All texts and all religious traditions will be examined analytically. Students are expected to understand and master this approach, which includes questioning conventional cultural assumptions about the historical composition and authorship of the Bible. Willingness to ask such questions and openness to new ways of thinking and reading are essential to successful participation in the course. This course meets the Literature LE Requirement.
Style: 90% Lecture, 10% Discussion.
**CNES 1905 Freshman Seminar: Assassination and Political Violence**
- **Credit(s):** 3
- **Instructor:** Gallia, Andrew B
- **Description:** This seminar will examine the role of assassination and political violence in the ancient world. Students will engage with primary sources and analyze how these events have shaped political and social relationships. Open to students who have not taken a general education course in political science.

**CNES 3081W Classical Epic in Translation**
- **Credit(s):** 3
- **Instructor:** Lechelt, Christine Elizabeth
- **Description:** This course is an introduction to ancient Greek and Roman epic literature. Students will read Homer's Iliad and Odyssey, Apollonius' Argonautika, and Virgil's Aeneid. The course will focus on understanding the literary techniques and cultural contexts of these works.

**CNES 3182 Egypt and Western Asia: Art and Archaeology of Ancient Egypt and Western Asia**
- **Credit(s):** 3
- **Instructor:** Canepa, Matthew P
- **Description:** This course explores the art and archaeology of Egypt and Western Asia from the dawn of civilization to the end of the ancient world. Students will study the development of ancient Egyptian and Near Eastern art and their cultural contexts.

**CNES 3201 The Bible: Context and Interpretation**
- **Credit(s):** 3
- **Instructor:** Levinson, PhD, Bernard M
- **Description:** This course will provide students with foundational knowledge in the study of the Bible. Students will engage with primary texts and develop skills in historical and literary interpretation.

**CNES 3535 Death and the Afterlife in the Ancient World**
- **Credit(s):** 3
- **Instructor:** Student may contact the instructor or department for information
- **Description:** This course investigates the concepts of death and the afterlife in ancient cultures. Students will study texts from various ancient traditions and analyze their cultural and historical contexts.

**Grading:**
- **CNES 1905:** 20% mid exam, 25% final exam, 30% reports/papers, 5% written homework, 20% additional semester exams.
- **CNES 3081W:** Each exam is 50% essay and 50% multiple choice.
- **CNES 3182:** 50% mid exam, 30% final exam, 15% reports/papers, 5% attendance. Two midterms (25% each); one final (30%). Two short (4 page) papers closely describing a work of art in a local collection like the MIA.
- **CNES 3201:** 20% mid exam, 25% final exam, 30% reports/papers, 5% written homework, 20% additional semester exams.
- **CNES 3535:** There will be two mid-term exams each worth 20%. There will be two short papers each worth 15%.

**Exam Format:**
- **CNES 1905:** Each exam is 50% essay and 50% multiple choice.
- **CNES 3081W:** Each exam is 50% essay and 50% multiple choice.
- **CNES 3182:** Vocabulary, short answer; majority essay.
- **CNES 3201:** Each exam is 50% essay and 50% multiple choice.
- **CNES 3535:** Each exam is 50% essay and 50% multiple choice.
Description: In this class we study attitudes, beliefs, and behaviors related to death and the afterlife found in the cultures of the ancient Mediterranean and Near East. Sources include literature, funerary art and epitaphs, as well as archaeological evidence for burial practices and care of the dead. The main objective of the course is to have us confront and explore a diverse set of responses to death and beliefs about the afterlife as found in ancient societies that may be more or less familiar to us. Art, literature, and mortuary practices alike help class participants (both the students and the professor) to confront and query our own expectations and attitudes. This approach enables us to consider our own experiences and expectations of death through a critical, analytical framework of historical and cultural comparison and not merely as personal response. The themes of mortality and care of the dead carry through all the topics, which are arranged more or less chronologically and geographically to consider Egypt, Mesopotamia, Canaan/Israel, Greece, Rome, early Judaism, and ancient Christianity. The final discussion paper may treat beliefs and practices surrounding death and/or the afterlife in a contemporary context that the student would like to analyze from the perspective of the course. The course will be web enhanced with WebCT.

Exam Format: midterm - short essays

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: 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.

CNES 3993 Directed Studies
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: von Dassow, Eva
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: Gallia, Andrew 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: 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, Matthew P.
Description: Student may contact the instructor or department for information.

CNES 5185 Hellenistic and Iranian Asia: Art and Archaeology of Hellenistic, Scythian, Kushan, and Sogdian Asia
3 credit(s);
Instructor: Canepa, Matthew P.
Description: Student may contact the instructor or department for information.

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 5796 Classical Texts: Approaches and Methods
3 credit(s);
Instructor: Nappa, Christopher
Description: This course will survey an array of approaches taken toward Greek and Latin literary texts in and since the late 19th century. Readings will be drawn from works on the history of classical scholarship, twentieth-century critical theory, and most importantly studies of classical texts themselves. The goal of this course is to introduce students to the variety of ways in which classical texts are read by professional scholars and to help students think carefully about the underlying assumptions that they bring to their own readings of classical texts.
Style: 25% Lecture, 45% Discussion, 30% Student Presentation.

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: Levinson PhD, Bernard M.
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: 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: von Dassow, Eva
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, Matthew 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: Krevans, Nita
Description: Student may contact the instructor or department for information.

CNES 8950 Topics in Classical & Near Eastern Studies
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.
CLSP 1010 Orientation in Clinical Laboratory Sciences
S-N only, 1 credit(s);
Instructor: Conway-Klaassen, Janice Marjorie
Description: Student may contact the instructor or department for information.

CLSP 4092 Honors Program: Laboratory Methods
3 credit(s);
Instructor: Conway-Klaassen, Janice Marjorie
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: Swinehart, Cheryl D
Description: This course will include the theory and application of the basic principles and techniques in clinical hematology and hemostasis. There will be both lecture and laboratory sessions. Students who have been admitted to the professional program in medical technology are eligible for this course.
Style: 33% Lecture, 67% Laboratory.
Exam Format: Multiple choice

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, 3 credit(s), max credits 6;
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 Marjorie
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 Marjorie
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 childhood 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 205 Elliott Hall

CgSc 8360 Seminar: Topics in Cognitive Science
1-4 credit(s), max credits 24, 6 completions allowed;
Instructor: Amirikian, Bagrat
Description: Student may contact the instructor or department for information.

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
CFAN 1201 Discovering Majors and Careers
A-F only, 1 credit(s);
Instructor: Hruska, Elizabeth Suzanne
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
3 credits; Meets CLE req of Diversity and Soc Justice US
Instructor: Lorenz, Karl W
Description: Student may contact the instructor or department for information.

CFAN 3000 Directed Studies in International Agriculture
A-F only, 2-4 credits, 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: 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: Nagle, Heather
Description: Want to get ahead of the competition when searching for jobs and internships? This 1 credit course is ideal
for undergraduate 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 skills assessment, resume writing, interviewing, job searching and salary negotiation. CFAN 1201 will be more appropriate if you have not yet researched, or are still exploring, your own strengths, skills and career plans. CFAN 5201 is ideal for graduate students thinking about academic or corporate job search.

**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 -Professionism

**CFAN 4293 Directed Study**
- **1-5 credit(s), max credits 15, 3 completions allowed;**
- **Instructor:** Hassel, Craig Alan
- **Description:** Student may contact the instructor or department for information.

**CFAN 4801H Honors Thesis**
- **A-F only, 3 credit(s);**
- **Instructor:** Kurle PhD, James E.
- **Description:** Student may contact the instructor or department for information.

**CFAN 4801H Honors Thesis**
- **A-F only, 3 credit(s);**
- **Instructor:** Stern, Marshall D
- **Description:** Student may contact the instructor or department for information.

**CFAN 4801H Honors Thesis**
- **A-F only, 3 credit(s);**
- **Instructor:** Earthman, Carrie 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.

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**College of Liberal Arts 49 Johnston Hall**

**CLA 1001 CLA First-Year Experience I**
- **S-N only, 1 credit(s);**
- **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 1005 Introduction to Liberal Arts Learning**
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.

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**College of Science and Engineering**

106 Lind Hall

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**CSE 1 Fundamentals of Engineering Review (E.I.T. Refresher)**

S-N only, 0 credit(s);

**Instructor:** Nordell, Daniel Edwin

**Description:** This course is a review of engineering fundamentals required to pass the National Council of Engineering Examiners Fundamentals of Engineering examination. It is designed to aid in preparation for the FE examination by presenting an organized review of material ordinarily contained in a college engineering curriculum. Primary emphasis will be on problem solving with orientation as close as possible to the type of questions contained in the exam. Prerequisite: Engineering or equivalent degree or candidate for degree Class format is as a web conference meeting three hours per week for ten weeks. Class sessions are scheduled to coincide with the twice-annual Fundamentals of Engineering exam cycle. Reference class website for more information.

**Style:** 75% Lecture, 25% Discussion.

**Grading:** 100% successful completion of the FE exam

**Exam Format:** National Fundamentals of Engineering exam. Multiple choice.

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**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.

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**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.

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**CSE 1001 First Year Experience**

A-F only, 1 credit(s);

**Instructor:** Sorenson-Wagner, Mark

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

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**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.

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**CSE 1001 First Year Experience**

A-F only, 1 credit(s);

**Instructor:** Soria, Krista Marie

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

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**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: Strykowski,Paul John
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: Hagerty,Meagan Lee
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: Heinonen,Miranda
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: Behr,Jessica Renee
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: Rudy,Jacob
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: Haagenson,Kayte Anne
Description: Student may contact the instructor or department for information.
CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Gondorchin, Megan Melissa
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Dillon, Tara C
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: Matthews, Rodney C
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Mixon, Joel David
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: Finlayson, Dave
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Christy, Rebecca Ann
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.

CSE 1413 Preparing for Careers in Science and Engineering
1 credit(s);
Instructor: Duffy, Amanda Jo
CSE 1905 Freshman Seminar: Design for Grand-Challenge Innovation
A-F only, 1-3 credit(s), max credits 4;
Instructor: Rose,Fred Anthony
Description: Student may contact the instructor or department for information.

Communication Studies 225 Ford Hall

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: Gesche,Nan
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: Grayden,Elizabeth D
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: 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: Odash,Diane L
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: 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: Bennett, Stephen L
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: Shada, Andrea
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: Zhu, Min
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: Zimmerman, Heidi M
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: Kanno, Ryo
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: Makstenieks, Scott Thomas
Description: Student may contact the instructor or department for information.
Ethics
Instructor: Hristova, Elena Dimitrova
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: Hamilton, Joy
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: Trifonov, Svilen Veselinov
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: Bedor, Emma
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: 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: Helwich, David A
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: Ranachan, Kate
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: Horvath, Daniel Ladislau
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: Hilland, 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: Calder, Simon Richard  
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: Anderson, Sky LaRell  
Description: Student may contact the instructor or department for information.

Comm 1908W Freshman Seminar: Rhetoric in U.S. Crises  
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 3110 Topics in Communication Studies  
3 credit(s), max credits 15, 5 completions allowed;  
Instructor: Helwich, David A  
Description: Student may contact the instructor or department for information.

Comm 3110 Topics in Communication Studies  
3 credit(s), max credits 15, 5 completions allowed;  
Instructor: Hill, Annie  
Description: Rhetoric of Law  
The image of Justice as a blind-folded woman holding scales and a double-edged sword is ubiquitous: it appears everywhere from courthouses to cartoons. How does this figure function rhetorically and what relation does it have to legal discourse and practice? We often hear about law doing justice, but how is justice shown, seen, and understood? And what happens if we imagine justice as neither blind nor balanced? To address such questions, this course explores the enduring relationship between rhetoric and law. Drawing upon literature, film, architecture, and legal and rhetorical theory, we will analyze the many connections among public representations of justice, aspirations of democracy, and state practices of legal judgment. We will also study the function, claim, and content of law and the fundamental role of rhetoric in legal argumentation. Readings include primary texts on rhetoric, legal scholarship, and works by theorists you may have read (or read about) in other Rhetoric courses: Austin, Bentham, Foucault, and Rawls. Assignments include analytical essays, exams, and a class presentation.

Comm 3190H Honors Course: Research Seminar in Communication  
A-F only, 3 credit(s), max credits 6;  
Instructor: STAFF  
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: Jurisz, Rebecca Ann  
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: 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: Frank, Jay Alexander  
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
Comm 3201 Introduction to Electronic Media Production
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Fischer,Mia Louisa
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: Student may contact the instructor or department for information.

Comm 3204 Advanced Electronic Media Production
A-F only, 4 credit(s);
Instructor: Neuman-Scott,Mark A
Description: Student may contact the instructor or department for information.

Comm 3211 Introduction to U.S. Electronic Media
3 credit(s);
Instructor: Squires,Catherine R
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: Cormany,Diane Laura
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: Bergh,Justin Lars
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: Arcy,Jacquelyn H
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: Wight,Jules
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: Online
Grading: See attached syllabus

Comm 3401 Introduction to Communication Theory
3 credit(s);
Instructor: Jones,Susanne Margarethe
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: Gesche,Nan
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: 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 3422 Interviewing and Communication
A-F only, 3 credit(s);
Instructor: Shada,Andrea
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: Killian, Justin L
Description: Student may contact the instructor or department for information.

Comm 3605W Persuasive Speaking and Speech Writing
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Prasch, Allison M.
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: Bell, Shelby
Description: Student may contact the instructor or department for information.

Comm 3676W Communicating Terrorism
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Stevens, Shannon Victoria
Description: Student may contact the instructor or department for information.

Comm 3970 Directed Study
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Koerner, Ascan Felix
Description: Student may contact the instructor or department for information.

Comm 3980 Directed Instruction
S-N only, 3 credit(s), max credits 6;
Instructor: Hammer, Jennifer Kay
Description: Student may contact the instructor or department for information.

Comm 3990 Research Practicum
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Jones, Susanne Margarethe
Description: Student may contact the instructor or department for information.

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. 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 4291 New Telecommunication Media
A-F only, 3 credit(s);
Instructor: Rodman, Gilbert B.
Description: Student may contact the instructor or department for information.

Comm 4404 Language Borderlands
3 credit(s);
Instructor: Sheldon PhD, Amy
Description: It is estimated that half of the people in world speak more than one language. What is the quality and texture of a life like when lived in more than one language? How does language contribute to our sense of identity and sense of community? We will read essays and books by and about people who are polylingual or bidialectal. Some had to learn English because their families fled their homeland. Some are American born. One writer chose to immerse herself in another language after her father's death. Each writer struggles to fit into two or more worlds of language and hence culture. Each searches for self-unification and meaning in multiple worlds. Their languages or dialects have been a source of self-exploration, self-disruption, and self-reintegration. We will explore the gifts and heartaches of living within and across other languages or dialects, Whether monolingual or polylingual, we will learn about our linguistic histories, and the multilingual world we live in. We will also consider linguistic multiplicity in the U.S. and the world. We will become more aware of the language ideologies that shape our thinking as an individual and as a nation.

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

Comm 5401 Advanced Theories of Communication
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 5402 Advanced Interpersonal Communication
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 5441 Communication in Human Organizations
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: Online
Grading: See attached syllabus

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 5617 History and Criticism of U.S. Public Discourse: 1630-1865
3 credit(s);
Instructor: Campbell, Karlyn Kohrs
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: Vavrus, Mary D
Description: Student may contact the instructor or department for information.

Comm 8231 Seminar: National and International Electronic Media Systems
3 credit(s);
Instructor: Pedelty, Mark Holmes
Description: COMM 8231 is about global media, in the broadest sense. There are two central objectives: (1) to learn about media systems, cultures, and theories that traverse international boundaries and (2) to share knowledge concerning a diverse range of media industries, texts, and locations. The first few weeks will provide a theoretical foundation. Core readings will introduce basic global, international, transnational, and transcultural media theories. We will use, test, compare, and critique those frameworks throughout the semester, even after transitioning to student-selected case studies. For the remainder of the semester, students will choose specific regions, media, and cases. Each student-led unit will begin with a short presentation by the student facilitator, who will then lead discussion around a relevant set of readings, with an emphasis on journal literature. In order to provide direction as to the structure, goals, and required elements for the student-led units, the instructor will begin by facilitating a model unit on Latin American film, with an emphasis on musical soundtracks. Although specific regions, readings, and media will be chosen by participants, each will be required to integrate film in a meaningful way as well, whether as illustration, critical lens, hybrid medium, or direct focus of study. Students are encouraged to explore and present topics directly related to their thesis and dissertation research and writing.
Style: 10% Lecture, 20% Film/Video, 50% Discussion, 20% Student Presentation.
Grading: 50% reports/papers, 20% reflection paper, 20% in-class presentation, 10% class participation.

Comm 8403 Seminar: Emotion and Communication
3 credit(s);
Instructor: Jones, Susanne Margarethe
Description: Student may contact the instructor or department for information.

Comm 8451 Seminar: Intercultural and Diversity Research
3 credit(s);
Instructor: Albert, Rosita D
Description: Student may contact the instructor or department for information.
CL 8001 Basic Seminar in Comparative Literature I
3 credit(s); Credit will not be granted if credit has been received for: CSDS 8001;
Instructor: Tageldin, Shaden M
Description: This advanced graduate seminar, the first of a two-semester Basic Seminar sequence, offers a broad introduction to theoretical concepts and paradigms that are foundational for various disciplines in the humanities and the interpretive social sciences today, and in particular for the scholarly projects typically undertaken in the graduate programs in Comparative Literature and Comparative Studies in Discourse and Society. While the course is designed to teach core texts in the Western philosophical tradition from the early modern period through the present, we will pair both non-Western primary sources and recent critical reappraisals of Western philosophy with the usual (and less usual) suspects of that tradition. Throughout, we will unsettle the bedrock assumption that "philosophy" and "theory" are fundamentally Western ways of knowing—or that, whereas "premodern" cultures can be studied through a diverse range of local philosophical traditions, modernity (even in its non-Western guises) can only be studied through equally "modern" (read: Western) theories. Even as we trace "standard" genealogies of modern thought, then, we will interrupt and disrupt those genealogies at every turn. Ultimately, our goal in this seminar will be to explore the possibilities, the limits, and the perils of transcultural epistemic comparison.
Readings will include selections from Bacon, Adorno and Horkheimer, Descartes, Ibn Khaldun, Vico, Hegel, Louverture, Marx, Kant, Marti, Tagore, Zhen, de Beauvoir, Fanon, Lorde, de Saussure, Volosinov, Derrida, Spivak, and Kilito.
Style: 25% Lecture, 50% Discussion, 25% Student Presentation.
Grading: 60% reports/papers, 20% in-class presentation, 20% class participation. Class participation includes attendance, three 500-word responses to readings on Moodle, contributions to class discussion, and mandatory office hours.

CL 8910 Advanced Topics in Comparative Literature: Spanish and Spanish-American Baroque/ Neobaroque
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Spadaccini, Nicholas
Description: Student may contact the instructor or department for information.

CL 8910 Advanced Topics in Comparative Literature: Blanchot
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: Forms of Critique: Adorno, Foucault and Beyond
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Rothe, Matthias
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.
Style: 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.
Grading: 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.

CL 8910 Advanced Topics in Comparative Literature: Propaganda
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Lovejoy, Alice Osborne
Description: Student may contact the instructor or department for information.

CL 8910 Advanced Topics in Comparative Literature: Forms of Critique: Adorno, Foucault and Beyond
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Schmieder, Falko
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.
Style: 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.
CSDS 8001 Basic Seminar: Comparative Studies in Discourse and Society I  
3 credit(s); Credit will not be granted if credit has been received for: CL 8001;  
Instructor: Tageldin, Shaden M  
Description: This advanced graduate seminar, the first of a two-semester Basic Seminar sequence, offers a broad introduction to theoretical concepts and paradigms that are foundational for various disciplines in the humanities and the interpretive social sciences today, and in particular for the scholarly projects typically undertaken in the graduate programs in Comparative Literature and Comparative Studies in Discourse and Society. While the course is designed to teach core texts in the Western philosophical tradition from the early modern period through the present, we will pair both non-Western primary sources and recent critical reappraisals of Western philosophy with the usual (and less usual) suspects of that tradition. Throughout, we will unsettle the bedrock assumption that “philosophy” and “theory” are fundamentally Western ways of knowing—or that, whereas “premodern” cultures can be studied through a diverse range of local philosophical traditions, modernity (even in its non-Western guises) can only be studied through equally “modern” (read: Western) theories. Even as we trace “standard” genealogies of modern thought, then, we will interrupt and disrupt those genealogies at every turn. Ultimately, our goal in this seminar will be to explore the possibilities, the limits, and the perils of transcultural epistemic comparison. Readings will include selections from Bacon, Adorno and Horkheimer, Descartes, Ibn Khaldun, Vico, Hegel, Louverture, Marx, Kant, Marti, Tagore, Zhen, de Beauvoir, Fanon, Lorde, de Sausseroue, Volosinov, Derrida, Spivak, and Kilito.  
Style: 25% Lecture, 50% Discussion, 25% Student Presentation.  
Grading: 60% reports/papers, 20% in-class presentation, 20% class participation. Class participation includes attendance, three 500-word responses to readings on Moodle, contributions to class discussion, and mandatory office hours.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Spanish and Spanish-American Baroque/Neobaroque  
3 credit(s), max credits 24, 8 completions allowed;  
Instructor: Spadaccini, Nicholas  
Description: Student may contact the instructor or department for information.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Blanchot  
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: Forms of Critique: Adorno, Foucault and Beyond  
3 credit(s), max credits 24, 8 completions allowed;  
Instructor: Rothe, Matthias  
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.  
Style: 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.  
Grading: 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Propaganda  
3 credit(s), max credits 24, 8 completions allowed;  
Instructor: Lovejoy, Alice Osborne  
Description: Student may contact the instructor or department for information.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Forms of Critique: Adorno, Foucault and Beyond  
3 credit(s), max credits 24, 8 completions allowed;  
Instructor: Schmieder, Falko  
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of
enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.

**Style:** 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.

**Grading:** 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.

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**CSDS 8993 Directed Study in Comparative Studies in Discourse and Society**

1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Casarino, Cesare
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: Wall-Romana, Christophe M
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.

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**Comparative and Molecular Biosciences**

**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 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 8361 Neuro-Immune Interactions**

3 credit(s);
Instructor: Molitor, Thomas William
Description: Student may contact the instructor or department for information.

**CMB 8371 Mucosal Immunobiology**

A-F only, 3 credit(s); MiCa 8001 or equiv or instr consent Credit will not be granted if credit has been received for:
MICA 8371;  
Instructor: Herzberg, Mark C  
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: Student may contact the instructor or department for information.

CMB 8560 Research and Literature Reports  
S-N only, 1 credit(s), max credits 8, 8 completions allowed;  
Instructor: Godden, Sandra Michele  
Description: Student may contact the instructor or department for information.

**Computer Science 4-192 Kenneth H. Keller Hall**

**CSci 1103 Introduction to Computer Programming in Java**  
4 credit(s);  
Instructor: wetzel, baylor  
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 1113 Introduction to C/C++ Programming for Scientists and Engineers**  
4 credit(s);  
Instructor: Meyer, Gary W  
Description: Student may contact the instructor or department for information.

**CSci 1133 Introduction to Computing and Programming Concepts**  
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); Concurrent registration is required (or allowed) in MATH 1271 or equiv or instr consent Credit will not be granted if credit has been received for: CSCI 1901H;  
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); [MATH 1271 or MATH 1371 or MATH 1571H], honors student
Credit will not be granted if credit has been received for: CSCI 1901;
Instructor: Terveen, Loren Gilbert
Description: Student may contact the instructor or department for information.

**CSci 1902 Structure of Computer Programming II**
4 credit(s);
Instructor: wetzel, baylor
Description: Student may contact the instructor or department for information.

**CSci 1913 Introduction to Algorithms, Data Structures, and Program Development**
4 credit(s);
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

**CSci 2011 Discrete Structures of Computer Science**
4 credit(s); MATH 1271 or MATH 1371 or instr consent
Credit will not be granted if credit has been received for: CSCI 2011H;
Instructor: Sturtivant, Carl
Description: Student may contact the instructor or department for information.

**CSci 2021 Machine Architecture and Organization**
4 credit(s);
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

**CSci 2033 Elementary Computational Linear Algebra**
4 credit(s);
Instructor: Boley, Daniel L
Description: Student may contact the instructor or department for information.

**CSci 3003 Introduction to Computing in Biology**
3 credit(s);
Instructor: Myers, Chad Leighton
Description: Introduction to computing for biology. New genomic and proteomic technologies are generating enormous amounts of data, giving us an unprecedented view of cellular function. To make sense of these data, biology researchers are becoming increasingly dependent on using computation in their work. This course will provide a practical introduction to several programming concepts including variables, flow control, input/output, strings, pattern matching, arrays, hash tables, functions, and subroutines. Students will complete lab assignments in the Perl and Matlab programming languages, which will focus on answering biological questions through analysis of real genomic and proteomic data.

**CSci 3081W Program Design and Development**
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Challou PhD, Daniel J
Description: Student may contact the instructor or department for information.

**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); 1902 and 2011 or instr consent; cannot be taken for grad CSci cr
Credit will not be granted if credit has been received for: CSCI 4041H;
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 sets 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 4041H Algorithms and Data Structures
A-F only, 4 credit(s); [1902, 2011, honors student] or instr consent. Cannot be taken for Grad CSci cr
Credit will not be granted if credit has been received for: CSCI 4041;
Instructor: Sturtivant, Carl
Description: Student may contact the instructor or department for information.

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 cr
Credit will not be granted if credit has been received for: CSCI 5131;
Instructor: Challou PhD, Daniel J
Description: Student may contact the instructor or department for information.

CSci 4203 Computer Architecture
4 credit(s); 2021 or instr consent; credit will not be granted if credit received for: 5201, EE 5361
Credit will not be granted if credit has been received for: EE 4363;
Instructor: Karpuzcu, Rahmet Ulya
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 cr
Credit will not be granted if credit has been received for: CSCI 5211;
Instructor: Zhang, Zhi-Li
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: Srivastava, Jaideep
Description: Student may contact the instructor or department for information.

CSci 4950 Senior Software Project
A-F only, 3 credit(s), max credits 6;
Instructor: wetzel, baylor
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: 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: 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: 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: Hecht, Brent 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: 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: Isler, Volkan Ibrahim
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: Knights, Dan
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: Guy, Stephen 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: McCamant, Stephen A.
Description: Student may contact the instructor or department for information.

CSci 4994H Honors Thesis
A-F only, 1-3 credit(s), max credits 6;
Instructor: Konstan, Joseph Andrew
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 5115 User Interface Design, Implementation and Evaluation
3 credit(s);
Instructor: Konstan, Joseph Andrew
Description: This is a project-focused course that covers the basics of user interface design, evaluation, and implementation. Students work in groups of 4 or 5 on a semester-long project that includes analysis of the problem domain, user skills, and tasks; iterative prototyping of interfaces to solve the user’s needs; several types of interface evaluation including user testing and walkthroughs; and implementation of the final prototype. A limited number of students from non-technical disciplines (e.g., psychology, graphic arts and design, educational and communications disciplines, etc.) are able to enroll in the course as non-programmers who participate in all aspects of the projects except implementation.
Style: 40% Lecture, 30% Discussion. In-class exercises and practice of techniques
Grading: 25% mid exam, 60% special projects, 15% other evaluation. Note: all are approximate figures
Exam Format: combined short and medium-length questions
CSci 5204 Advanced Computer Architecture
3 credit(s); 4203 or EE 4363 credit will not be granted if credit received for: 8203, EE 8365
Credit will not be granted if credit has been received for: EE 5364;
Instructor: Zhai, Antonia Bingheng
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 5231 Wireless and Sensor Networks
3 credit(s);
Instructor: He, Tian
Description: Student may contact the instructor or department for information.

CSci 5271 Introduction to Computer Security
3 credit(s);
Instructor: McCamant, Stephen A.
Description: Student may contact the instructor or department for information.

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: Kuang, Rui
Description: Student may contact the instructor or department for information.

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);
CSci 5607 Fundamentals of Computer Graphics 1
3 credit(s); Concurrent registration is required (or allowed) in 2033, Concurrent registration is required (or allowed) in 3081
CREDIT WILL NOT BE GRANTED IF CREDIT HAS BEEN RECEIVED FOR: CSCI 4107;
Instructor: Intrante, Victoria
Description: Student may contact the instructor or department for information.

CSci 5707 Principles of Database Systems
3 credit(s); Concurrent registration is required (or allowed) in 2033, Concurrent registration is required (or allowed) in 3081
CREDIT WILL NOT BE GRANTED IF CREDIT HAS BEEN RECEIVED FOR: CSCI 4707;
Instructor: Shekhar, Shashi
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
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Konstan, Joseph Andrew
Description: Student may contact the instructor or department for information.

CSci 5980 Special Topics in Computer Science: Recommender Systems
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Konstan, Joseph Andrew
Description: Student may contact the instructor or department for information.

CSci 5980 Special Topics in Computer Science
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Myers, Chad Leighton
Description: Student may contact the instructor or department for information.

CSci 5980 Special Topics in Computer Science: Animation & Planning 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: Challou PhD, Daniel J
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
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: 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: Janardan, Ravi
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: Saad, Yousef
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: 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
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Tripathi, Anand R
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: Du, David Hung-Chang
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: Heimdahl, Mats
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: Shekhar, Shashi
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: Gini, Maria 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: 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.
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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 8551 Intelligent Agents
3 credit(s);
Instructor: Gini, Maria L
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CSci 8715 Spatial Databases and Applications
3 credit(s);
Instructor: Shekhar, Shashi
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CSci 8760 Plan B Project
S-N only, 3 credit(s);
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CSci 8970 Computer Science Colloquium
  S-N only, 1 credit(s);
  Instructor: Isler, Volkan Ibrahim
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CSci 8980 Special Advanced Topics in Computer Science
  3 credit(s), max credits 27, 9 completions allowed;
  Instructor: Du, David Hung-Chang
  Description: Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Parallel & Concurrent Programming: A PL Perspective
  3 credit(s), max credits 27, 9 completions allowed;
  Instructor: Van Wyk, Eric
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CSci 8980 Special Advanced Topics in Computer Science: Big Data Computing: A Systems View
  3 credit(s), max credits 27, 9 completions allowed;
  Instructor: Chandra, Abhishek
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CSci 8980 Special Advanced Topics in Computer Science: Spatial User Interfaces
  3 credit(s), max credits 27, 9 completions allowed;
  Instructor: Keefe, Daniel F
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CSci 8980 Special Advanced Topics in Computer Science: Algorithmic Techniques for Big Data Analysis
  3 credit(s), max credits 27, 9 completions allowed;
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  1-3 credit(s), max credits 9, 9 completions allowed;
  Instructor: Karypis, George
  Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
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  Instructor: Hopper, Nicholas J
  Description: Student may contact the instructor or department for information.
CSci 8991 Independent Study
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Instructor: Jensen, Steve
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Instructor: McCamant, Stephen A.
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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
Description: Student may contact the instructor or department for information.

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1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Dovolis, Chris John
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Instructor: McCamant, Stephen A.
Description: Student may contact the instructor or department for information.

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);
Instructor: Arnold, Todd W.
Description: Student may contact the instructor or department for information.

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: Wenck,Troy Alan
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 3001 Introduction to Construction
3 credit(s);
Instructor: Kuehni,Rose 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 restrictions. 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.
Style: 100% Web based
Grading: See attached syllabus

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. <b> TEST </b>

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. Introduces key legal, ethical, and risk frameworks that apply to construction activity. Case studies. Strategies to minimize/allocate legal liability and risk.

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 4021 Construction Planning and Scheduling
3 credit(s);
Instructor: Galetka,David Alan
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
**CMgt 4031 Construction Safety and Loss Control**
3 credit(s);
**Instructor:** Carroll, Mil
**Description:** Introduction to construction safety, health, and loss control. Hazard recognition. Control procedures.
Management systems for measuring/evaluating loss control performances in the construction industry.

**CMgt 4073 Building Codes for Construction Managers**
1 credit(s);
**Instructor:** Holm, Scott Franklin
**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. Building codes history, foundation, structure and organization. Importance to the built environment throughout building life cycle: design, construction, occupancy, demolition. Code compliance and role of building code official. Interpretation and application to specific scenarios. Recognizing and correcting code deficiencies.

**CMgt 4193 Directed Study**
1-4 credit(s), max credits 12, 3 completions allowed;
**Instructor:** STAFF
**Description:** Topic arranged in consultation with a Construction Management directed study faculty adviser and your academic adviser. For information, see the Class URL. To download the agreement form:
http://cce.umn.edu/documents/DCP/BAS-Student-Faculty-Agreement.doc

**CMgt 4196 Construction Management Internship**
S-N only, 1-4 credit(s), max credits 12, 3 completions allowed;
**Instructor:** Hilger, A Peter
**Description:** Hands-on work experiences in a construction company, applying coursework in the workplace, contributing knowledge of best practices, and participating in career development exercises.

**CMgt 4201 Construction Accounting**
A-F only, 2 credit(s);
**Instructor:** Elthon, Dwight 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. Introduction to construction and processes that shape our environment. 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. (Syllabus for online version is under construction as of April 2013).
**Style:** Online
**Grading:** See attached syllabus

**CMgt 4211 Facility Cost Accounting and Finance**
A-F only, 2 credit(s);
**Instructor:** Taylor, Steven Harry
**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 construction and processes that shape our environment. Lease types. Determination of total annual facility costs. Students apply accounting concepts within real property/facilities context. How to interpret financial statements and create capital/operating budgets. Asset depreciation, capital planning, expense management. Financial terminology for presenting to Corporate Suite.
**Style:** Online
**Grading:** See attached syllabus

**CMgt 4471 Sustainability for Construction Managers**
A-F only, 2 credit(s);
Instructor: Forsberg, Dale John
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 construction and processes that shape our environment. This course will cover the building industry's impact on the environment; sustainable building initiatives; environmental principles and practices throughout pre-con, construction, close-out, and operations; impact on the construction manager's role, procurement methods, contracts, estimating and scheduling, and team structure; adoption issues facing green construction; current technologies and future movements. Real world knowledge will be applied through case studies, guest lectures, and team projects.
Style: Online
Grading: See attached syllabus

CMgt 4550 Topics in Construction Management
A-F only, 1 credit(s), max credits 12, 6 completions allowed;
Instructor: Hietpas, Jay Jerard
Description: The triple constraint of time/cost/quality has often been challenged by traditional design/bid/build delivery methods. The private sector has had a unique advantage in its ability to negotiate contracts in the absence of firm bidding rules, including the extensive use of design/build delivery methods, while the public sector has been required by statute to bid to the lowest responsible bidder using design/bid/build. In an attempt to find the right balance that respects the competitive public bidding process while taking advantage of alternative project delivery strategies, the public sector has used enabling legislation to aggressively find new ways to contract project delivery, improving quality, speed of delivery and cost management while reducing risk. This course will explore the methods of innovative contracting used by MnDOT and their underlying strategies, techniques, metrics, and outcomes, using a case study approach.

CMgt 4562 Building Envelope Design and Construction
A-F only, 2 credit(s);
Instructor: Campbell, David W
Description: The roof, exterior walls, and below-grade foundation, are the three major building systems that collectively make up what is referred to as the "Building Envelope". The building envelope is considered the first line of defense against the effects of weather and other environmental influences. 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. The design detailing will also address the critical interface between these three major systems.
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.

Coptic 330 Folwell Hall

Copt 5001 Elementary Coptic
3 credit(s);
Instructor: Sellew, Philip
Description: Coptic is the final form of the ancient Egyptian language, written in the Greek alphabet, and employed mostly by the Christians of Egypt. Many important religious and philosophical writings from antiquity, including such famous works as the Gospel of Thomas, survive mostly or only in the Coptic language. In this one-semester course we gain a basic understanding of Coptic grammar, syntax, and vocabulary. A second course (5002) offered in the Spring semester will give
students a chance to read some of the highlights of Coptic literature, such as the Life of Antony, the Sayings of the Desert Fathers, magical spells, or selections from the so-called Nag Hammadi Library. Previous study of an ancient language is recommended, but anyone with a strong interest in Coptic culture or Egyptian language is encouraged to enroll.

Style: 25% Lecture, exercises and class discussion of basic linguistic structures.

Grading: 20% final exam, 40% class participation, 40% other evaluation. Daily homework and bi-weekly tests.

Exam Format: Translation and grammatical analysis of Coptic texts.

Cultural Studies and Comparative Literature

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: Haines, Christian Philip
Description: Student may contact the instructor or department for information.

CSCL 1201 Introduction to Cinema and Media Culture
4 credit(s); Credit will not be granted if credit has been received for: SCMC 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
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: 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
Instructor: Lekas, Michelle Yvonne
Description: In CINEMA AND IDEOLOGY, we will take the two terms that make up the course's title and weave them together in a lecture/discussion/viewing and presentation format. First, we will concentrate on various definitions of Ideology, from Marx, Althusser, and DeBord, and we will view various film examples that elucidate and complicate the problem of how ideology works. Next, we will move on to specific ideological constructions in film: of nation, work, family, and war. Finally, we will set up films for analysis, both of themselves as media, and as propagandists for, or critics of, dominant ideolog(ies). We will read one article weekly, and there will be two exams and approximately 15 pages of writing.

CSCL 3172 Music as Discourse
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Gallope, Michael
Description: Student may contact the instructor or department for information.

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: David, Thomas P
Description: 'Everyday life' is where we spend a majority of our existence, and on the surface, it would seem that there is not much 'interesting' or 'original' about everyday life. Yet, the 'everyday' is a lens through which we understand the most basic (and most complicated) aspects of our identities, desires, relationships, and worldviews. 'The Rhetoric of Everyday Life'; the course will examine, through a variety of readings and scholarly works, how the everyday is the site of social and political power.
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 social groups and atomize and anesthetize individuals. The unifying theme of the course will be the revolutionary (in all senses) nature of everyday life. We will also pay particular attention to the dynamic relationships between consumer capitalism, politics, and the rhetorics and practices of contemporary citizenship.

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: Vayo, Isaac
Description: 'Everyday life' is where we spend a majority of our existence, and on the surface, it would seem that there is not much 'interesting' or 'original' about everyday life. Yet, the 'everyday' is a lens through which we understand the most basic (and most complicated) aspects of our identities, desires, relationships, and worldviews. 'The Rhetoric of Everyday Life' will pursue the goal of better understanding the ways in which and reasons why the 'everyday' is so often ignored or dismissed, as well as our own part in this rhetoric and practice. We will attempt to answer, among others, these questions: How does 'everyday life' contribute to the formation and regulation of human consciousness? What do these everyday choices and practices reveal about our personal identity, perceptions, thoughts, values, and understanding of the world around us? How do we discern between what we need and desire to both sustain and satisfy us? How do we understand why the world is the way it is, and how we should function in it? The unifying theme of the course will be the revolutionary (in all senses) nature of everyday life. We will also pay particular attention to the dynamic relationships between consumer capitalism, politics, and the rhetorics and practices of contemporary citizenship.

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: 15% mid exam, 15% final exam, 50% reports/papers, 20% in-class presentation.

CSCL 3177 On Television
4 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: August, Tim
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: Humbert, Kevin Eric
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:** 15% mid exam, 15% final exam, 50% reports/papers, 20% in-class presentation.

**CSCL 3321W Theories of Culture**

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

**Instructor:** Vayo, Isaac

**Description:** "Culture" has emerged as an object of study in a number of different disciplines, including anthropology, cultural studies, history, literature, sociology, media criticism, theatre studies, and women's studies, among others. What remains less well understood are the basic terms and problems that shape disciplinary investigations of cultural objects, ideas, and practices. "Theories of Culture" will provide an introduction to key theoretical texts (from the works of Marx, Freud, and others) and an interrogation of some of the most influential approaches to the study of culture in the twentieth century (such as that of Michel Foucault and Raymond Williams). We will attempt to answer, among others, these questions: What makes it possible to think of culture as a specific mode of conceptualizing as well as narrating life? Who are the major theorists and critics of culture? The objective of this course is to provide a conceptual framework for understanding 'culture' in the contemporary moment and, to that end, we will examine key terms as well as central problems in modern cultural analysis, taking 9/11 and its aftermath as a unifying case study.

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

**Grading:** 50% reports/papers, 10% quizzes, 20% written homework, 20% class participation.

**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:** Gill, Meredith Morgan

**Description:** This course examines the concept of nature as a cultural and political construct used to justify and contest how human and non-human animals live within and against 'the world'. We will study the historical evolution of our modern concept of nature as well as the future of 'the natural' as a viable political category. In so doing, we will cover various historical, philosophical, literary, filmic, and biological visions of nature including: divine creation, nature as a mechanical structure, changing concepts of evolution, constructions of human nature, and the emergence of discourses on ecosystems.

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

**Grading:** 15% mid exam, 15% final exam, 50% reports/papers, 20% in-class presentation.

**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:** Hadley, Matthew James

**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:** Cannavino, Thomas Patrick

**Description:** When the U.S. Supreme Court struck down most of the Defense of Marriage Act in June 2013, a majority of justices agreed that the federal government's refusal to recognize same-sex marriages violated constitutional rights to equal protection of the law. In so doing, the justices decided that the legislation discriminated against a particular "class" of persons, in this case, the queer population (broadly construed). Indeed, in our century, and in this country, "gay," "lesbian," "bisexual," and "queer," among many others, are words that apply to a person's very being; hence, it has become possible to be a "gay person" and to discriminate against "gay people" and to fight for "gay rights." This has not always been the case in the West. In 1631, for instance, when the Earl of Castlehaven was tried and beheaded for repeatedly sleeping with his male servants, neither he nor anyone else thought of him as "gay" or "homosexual." The identity category did not exist, and the earl's furtive sex life simply amounted to a series of crimes: things he had done that had nothing to do with the truth of who he was. This course will explore how our sexual desires and acts came to signify something about our essential
natures, and how the nineteenth-century invention of "sexuality" with its dualistic logic defined "normative" sexual roles for man and woman against complex schemes for organizing "perversion." We'll think about the distinctions we understand among "sex," "gender," and "sexuality," as we use the words today, and the historical, discursive development of these very distinctions. We'll approach these questions, among others, from a wide variety of disciplinary perspectives, including philosophy, anthropology, medicine, psychoanalysis, public health, history, and film. 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 will be our analysis of the popular division between "nature" and "culture," or timeless truth and human error, as a 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.

**Style:** 35% Lecture, 15% Film/Video, 40% Discussion, 10% Small Group Activities.

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

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**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:** When we think of politics, we tend to imagine a realm removed from everyday life. This course explores a very different thesis, namely, that politics begins with the concrete activities and experiences of the human body. The argument guiding our reflections will be that of the French philosopher Michel Foucault, who, in *The History of Sexuality*, Vol. 1, proposes a historical shift in which 'life itself' becomes the object of politics in modern times. We will work through the details of Foucault's analyses, but we will also explore more broadly what it means to reconceive politics in terms of populations and individual bodies, as well as other social groupings, such as class, gender, and race. As the title of this course suggests, we will be especially concerned with how we represent (through language, image, etc.) the body and its activities. Our operating assumption will be that representations are never neutral, that they always involve political suppositions and consequences. To cite one of the cases we will discuss, representing someone as a 'victim' of AIDS versus representing a community as 'struggling with' AIDS are very different acts. Topics we will examine in a critical fashion include: the laboring body under capitalism; the construction of sexual identity; the ways race divides and organizes national populations; reproductive rights; feminism; and the AIDS epidemic of the 1980s. In exploring the political and historical complexities of the human body, we will learn how the body is a process of cultural and political experimentation.

**Grading:** 15% mid exam, 15% final exam, 50% reports/papers, 10% class participation, 10% other evaluation.

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**CSCL 3461 Monsters, Robots, Cyborgs**

3 credit(s); Meets CLE req of Literature

**Instructor:** David, Thomas P

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

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**CSCL 3465 Aliens**

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

**Instructor:** STAFF

**Description:** Vampires: History, Hype, and Hysteria Imagine the following scene: A dark room full of antiquities in Berggasse 19, Vienna, Austria on a late November evening, a couple of years before the dawn of the 20th century. Dr. Sigmund Freud is dozing off at his desk, dead tired from working on his masterpiece *The Interpretation of Dreams*. Suddenly, a knock on the door. Count Dracula walks in and lies down on the couch. "Tell me about your mother!?” demands the doctor. Now imagine a similar scene with just two differences. Instead of Berggasse 19 we now see 221B Baker Street, London. Instead of Dr. Freud it's Dr. Watson dozing off. Once again a knock on the door; once again Dracula walks in. "Holmes, Holmes!?" Watson might shout while frantically reaching for his pistol with the silver bullet. But what could even Sherlock Holmes do? Who? what? might these Dracula figures represent? For Freud, just another wealthy lunatic from Vienna's upper class. For Dr. Watson, perhaps a nightmare. And so on. But there are other possible answers: Our collective subconscious, a historical figure, a time traveler and shape-shifter, a real Rumanian zombie. A never-ending story! This course seeks to illuminate the undead and uncanny character of Count Dracula and his kin in the context of the dark side of post-Enlightenment modernity, from the Hapsburg empire to True Blood and Twilight. Based on historical documents from the 17th century, fiction, film and Freud's writings, we will explore the roots of "Vampire History, Hype and
Hysteria,” including topics such as psychology and politics, the dramaturgy of destructiveness, euthanasia, superstition, and economics. After all, the undead are responsible for a billion-dollar business.

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 3993 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Brown Jr, Robert L
Description: Student may contact the instructor or department for information.

CSCL 5411 Avant-Garde Cinema
A-F only, 4 credit(s);
Instructor: Bizri, Hisham M.
Description: Student may contact the instructor or department for information.

CSCL 5800 Translation Studies
S-N only, 1 credit(s);
Instructor: Thomas, Gary Craig
Description: Student may contact the instructor or department for information.

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Photography in Other Media
3 credit(s), max credits 32, 8 completions allowed;
Instructor: Hueser, Rembert
Description: Student may contact the instructor or department for information.

CSCL 5993 Directed Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Pepper, Thomas Adam
Description: Student may contact the instructor or department for information.

Curriculum and Instruction

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 1905 Freshman Seminar**
OPT No Aud, 3 credit(s);
Instructor: Gentzler, Yvonne S.
**Description:** Student may contact the instructor or department for information.

**CI 1942 Freshman Seminar: Technology and Society**
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Pazurek, Angelica
**Description:** This online seminar is designed to educate learners about the current impact of social media, particularly those most often used today, and those which could potentially arise with future developments and innovations. A humanitarian perspective will provide the lens by which we will examine the universal utility for social media and explore strategies and measures we can take as individuals and community members to leverage their potential for forming connections and interacting as global citizens. In this seminar we will examine theoretical approaches to understanding, analyzing and participating in social media. As we investigate the impact of social media, we will focus our attention on their use for personal, professional, educational, and entertainment purposes. All topics will be introduced and discussed in terms of contemporary practices. The seminar will be experience-based in that learners will be asked to engage in many of the online social media tools and social networking activities that have been popularized today. Class colleagues will engage in dialogue in conjunction with the use and analysis of various social media tools [analysis will also include their design and development-- the ?science and engineering? that is specific to technological tools]. Toward the end of the course, learners will collaboratively explore aspects of social media that are of interest to them in order to complement the topics of discussion, readings, and online technology experiences.

**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 3311W
Credit 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 3311W
Credit 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: Lin, Jing-Huey
**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 3311W
Credit 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 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: Kennedy, Jolie
**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: 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: Zhang, Shaomeng
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: Bakir, Nesrin  
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  
Description: Student may contact the instructor or department for information.

CI 3001 Survey of Art Activities  
A-F only, 2 credit(s);  
Instructor: Blanck, Christian Robert  
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: Gast, Kelly  
Description: Student may contact the instructor or department for information.

CI 3283 Practicum: Special Education K-6  
S-N only, 2 credit(s);  
Instructor: Lam, Elizabeth Anne  
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 3401W Diversity in Children’s Literature  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Oziewicz, Marek Cezary  
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: Engman, Melissa M  
Description: Student may contact the instructor or department for information.

CI 3611W Basics in Teaching English as a Second Language
CI 3611W Basics in Teaching English as a Second Language
OPT No Aud, 4 credit(s); Meet CLE req of Writing Intensive
Instructor: Watson, Jill Ann
Description: Student may contact the instructor or department for information.

CI 3612 Introduction to Pronunciation and Grammar for ESL Teachers
OPT No Aud, 4 credit(s);
Instructor: Vanek, Jenifer Baker
Description: Student may contact the instructor or department for information.

CI 3613 Practical Language Learning for International Communication
OPT No Aud, 3 credit(s);
Instructor: Lazaraton, Anne
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: 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: Lin, Jing-Huey
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: Kennedy, Jolie
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: Feyissa, Solen Desalegn
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: Zhang, Shaomeng
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  
Description: Student may contact the instructor or department for information.

CI 4413 Practicum: Working With Developing Readers  
S-N only, 2 credit(s);  
Instructor: Israelson, Madeleine Sarah Heins  
Description: Student may contact the instructor or department for information.

CI 5049 Art Media Techniques  
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Johnson, Jeremy L  
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 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 5156 Popular Culture, Teaching, and Learning  
A-F only, 3 credit(s);  
Instructor: Swiss, Thom  
Description: Your course is grounded in the premise that schooling can usefully be expanded to consider the immense influence and importance of popular culture in the lives of adolescents and children. The course introduces a number of approaches to the study of popular culture and education, exploring the intersection between everyday life and broader contexts. Pop Culture includes sporting events, toys, clothing, shopping malls, vampire mania, music festivals, comics, and so on. At the end of this course, you should be able to: * Evaluate diverse approaches to thinking and writing about popular culture as pedagogy * Develop teaching strategies/assignments on this topic * Identify relationships between theories about popular and their relationship to education.  
Style: 100% Web Based.  
Grading: responses to assignments, readings, classmates' work.  
Exam Format: no exams.

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, 2-10 credit(s), max credits 30, 3 completions allowed;
Instructor: Carlson, Ann Ruhl
Description: Student may contact the instructor or department for information.

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: Bym, 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: Bym, Katherine Margaret
Description: Student may contact the instructor or department for information.

CI 5287 Capstone Project: Improvement of Teaching in Elementary and Pre-Kindergarten Schools
S-N only, 3 credit(s);
Instructor: Mitchell, Kathleen
Description: Student may contact the instructor or department for information.

CI 5301 Foundations of Computer Applications for Business and Education
3 credit(s);
Instructor: Isaacson, Kris
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 to 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 5301 Foundations of Computer Applications for Business and Education**  
3 credit(s);  
**Instructor:** McGill, Chuck  
**Description:** Instructional uses of computers and representative business, education, and marketing applications, including word processing, databases, spreadsheets, and graphic design.

**CI 5325 Designing and Developing Online Distance Learning**  
A-F only, 3 credit(s);  
**Instructor:** Pazurek, Angelica  
**Description:** Student may contact the instructor or department for information.

**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:** In this online course we will learn to create innovative designs for mobile devices as well as for online learning. We will discuss and create wicked designs but we will not be developing any software so no need to sweat about programming. The fundamental goal of this course is to stimulate and advance the ways you think about the design process. You will learn to become a better designer through discussion, research, exploration, and simply? design.

**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 5365 Contemporary Software Development Issues and Tools**  
3 credit(s);  
**Instructor:** Lecheler, Lucas Michel  
**Description:** Student may contact the instructor or department for information.

**CI 5410 Special Topics in the Teaching of Literacy**  
1-3 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 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 5417 Elementary literacy Instruction for ESL Students
A-F only, 3 credit(s);
Instructor: Delbridge,Annie
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 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: Rollag, Stephanie Marie  
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 5432 Instructional Leadership in Reading in Kindergarten and the Elementary Grades  
A-F only, 3 credit(s);  
Instructor: Bergeson, Kristi Tamte  
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 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 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: 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: Mc Fadden MA, Justin R  
Description: Student may contact the instructor or department for information.

CI 5536 Equity, Policy, and Assessment in Science Education
CI 5539 Improving Secondary Science Instruction: Surviving the First Two Years
A-F only, 3 credit(s);
Instructor: Hoelscher, Mary Helen
Description: Student may contact the instructor or department for information.

CI 5541 Teaching History and Nature of Science
A-F only, 3 credit(s);
Instructor: Billington, Barbara Lynne
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: Glynn, Cassandra Lea
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: Ranney, Susan Elaine
Description: Developing skills for selecting, organizing, providing, and assessing effective second language learning opportunities through study, practice, and reflection.

CI 5632 Literacy and Language Development in Second Language Classrooms
A-F only, 3 credit(s);
Instructor: Stone PhD, Karla
Description: Student may contact the instructor or department for information.

CI 5642 Assessing English Learners
A-F only, 3 credit(s);
Instructor: Cushing-Leubner, Jenna
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 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: Watson, Jill Ann
Description: Student may contact the instructor or department for information.
CI 5653 Methods in Teaching English as a Second Language (ESL) in Higher Education
OPT No Aud, 3 credit(s);
Instructor: Tarone, Elaine E
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 5670 Foundations of Dual Language and Immersion Education
3 credit(s);
Instructor: Tedick PhD, Diane J
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: Owens-Lyons, Stephanie
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: Torres, Jill
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: Clark, Chris
Description: Student may contact the instructor or department for information.
CI 5742 Advanced Methods of Teaching the Social Studies
A-F only, 3 credit(s);
Instructor: Mayo Jr, J.B.
Description: Our focus in this course will be on refining our repertoire of instructional methods in light of our continued reflections on significant theoretical issues; in other words, to become informed and reflective practitioners. We will devote special attention to reading and writing in the social studies, as well as adapting lessons for learners with specific needs. We will do this by extending basic concepts from the summer semester (such as curriculum, instruction, and assessment) by considering issues of power and pluralism. Finally, we will spend time debriefing your fall student teaching experience. Style: 20% Lecture, 30% Discussion, 20% Laboratory, 20% Small Group Activities, 10% Demonstration.

CI 5745 Engaging Youth With Social Studies Texts
A-F only, 3 credit(s);
Instructor: Avery, Patricia Grant
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: Wiley, Bethann Marie
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 8075 Seminar: Art Education
A-F only, 2 credit(s);
Instructor: Bequette, James W
Description: Student may contact the instructor or department for information.

CI 8079 Research in Art Education
A-F only, 3 credit(s);
Instructor: Bequette, James W
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: Hermes, Mary Rose
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: O'Brien, David
Description: Survey of educational research methods, comparison of underlying assumptions/procedures.
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 8147 Critical Discourse Analysis in Educational Research  
A-F only, 3 credit(s);  
Instructor: Lewis, Cynthia  
Description: This course is designed for doctoral students who are interested in critical discourse analysis (CDA) as theory and method. CDA examines how social and power relations, identities, and knowledge are constructed through written, visual, and spoken texts in social settings such as schools, families, and communities. We will begin the course by addressing the theoretical and methodological traditions that inform current uses of CDA in educational research. The rest of the course will focus on learning several critical approaches to analyzing spoken, written, and visual texts. Students will have opportunities to apply CDA methods to research in specific disciplinary fields of education. Although the primary focus will be on CDA as a research method, the course also will address the theoretical underpinnings of CDA in critical discourse studies. The focus of this course is on data analysis rather than on other parts of the research process. Students who do not have spoken or written data samples to work with for analysis should talk to me to arrange to collect or borrow data for the course. The course includes a good deal of practice in CDA and addresses its usefulness and limitations in relation to other qualitative approaches to research. We will conduct the course as a seminar and methods workshop. Students will be responsible for leading discussions, participating in data analysis sessions, and responding to each other's work. Course Objectives - to understand the theoretical and methodological traditions that inform current uses of CDA in educational research. - to identify appropriate uses of CDA in educational research as determined by research questions and purposes. - to learn several approaches to CDA that can be used for educational research. - to apply CDA approaches to research in education. - to understand the connection between CDA and critical discourse studies as a theoretical framework.  
Style: 10% Lecture, 50% Discussion, 40% Small Group Activities.  
Grading: 55% reports/papers, 45% other evaluation.

CI 8148 Conducting Qualitative Studies in Educational Contexts  
3 credit(s);  
Instructor: Hermes, Mary Rose  
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  
1-6 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: 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 8155 Immigrant Families and U.S. Schools  
A-F only, 3 credit(s);  
Instructor: Ngo, Bic  
Description: Student may contact the instructor or department for information.

CI 8159 Culture and Teaching Colloquium  
A-F only, 3 credit(s), max credits 6;  
Instructor: Ngo, Bic  
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: Bigelow, Martha
Description: Student may contact the instructor or department for information.

CI 8195 Problems: Improvement of Instruction
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 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: Lensmire, Timothy J.
Description: Student may contact the instructor or department for information.

CI 8198 Problems: Teacher Education
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Ngo, Bic
Description: Student may contact the instructor or department for information.

CI 8350 Special Topics in Learning Technologies
A-F only, 1-3 credit(s), max credits 6;
Instructor: Miller, Charles Devaughn
Description: Student may contact the instructor or department for information.

CI 8412 Research in Reading
3 credit(s), max credits 6;
Instructor: O'Brien, David
Description: Theory of and research on writing process. Applications to developing writing curriculum/instruction.

CI 8461 Sociocultural Theory, Education, and Literacy
3 credit(s);
Instructor: Lewis, Cynthia

CI 8492 Readings in English Education and Reading
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Majors, Yolanda
Description: Student may contact the instructor or department for information.

CI 8542 Modeling and Model-Based Reasoning in STEM Education
A-F only, 3 credit(s);
Instructor: Smith, Karl Aldrich
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: Roehrig, Gillian Heather
Description: Student may contact the instructor or department for information.

CI 8572 Learning Theory and Classical Research in STEM Education
A-F only, 3 credit(s);
Instructor: Guzey, Siddika Selcen
Description: Student may contact the instructor or department for information.
CI 8595 Problems: Science Education  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: Billington, Barbara Lynne  
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

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 8742 Seminar: Research in Social Studies Education  
A-F only, 3 credit(s);  
Instructor: Avery, Patricia Grant  
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 8994 Directed Research in Family, Youth, and Community  
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;  
Instructor: Gentzler, Yvonne S.  
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); 1122 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); [1122, 1004] in another language or passing score on LPE or grad student 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
Dance: Barbara Barker Center for Dance

Dance 1001 Modern Dance Technique 1
1 credit(s);
Instructor: Jenson, Matthew Paul
Description: This course is a basic introduction to modern dance technique. It is first in the four semester sequence of modern dance technique for non-dance majors. It assumes no prior knowledge in dance. Over the course of the semester we will build a warm up in which students will be introduced to dance technique to stretch and strengthen muscles and articulate joints with healthy alignment. Students will perform movement sequences that are danced in place as well as across the floor and learn different strategies for how to identify the different components of movement so that they can embody movement with clarity, efficiency, and power. Students will taste a variety of movement styles as gain an understanding of modern dance history and the contributions of influential dancers and dancemakers. Also includes basic elements of dance improvisation, composition, and performance.
Style: 100% Studio.
Grading: 10% reports/papers, 30% attendance, 60% class participation.

Dance 1001 Modern Dance Technique 1
1 credit(s);
Instructor: Davies, Angharad Sian
Description: DNCE 1001 Modern 1 Fall and Spring Semester: This course is an introductory approach to contemporary modern dance technique. You will explore the specifics of space, time, and energy. At the same time, you will work with fundamental modern dance vocabulary in order to become a versatile and technically sound dancer. Class work will emphasize anatomical awareness and articulation, connection to the floor, strength and flexibility, musicality, and clarity of movement. We will focus on making choices with intention; following improvisational impulses; on using technique as a tool for communication; and on finding our own individual styles as compelling and magnetic performers.

Dance 1010 Modern Dance Technique 3
1-2 credit(s), max credits 4;
Instructor: Jenson, Matthew Paul
Description: This section is intended for non-dance majors and is the third of the four semester of modern dance technique for non-dance majors. This course assumes familiarity with the movement concepts and techniques covered in Modern Dance 1 and 2. Class consists of warm-up, center floor sequences and combinations, and across-the-floor combinations. This course will also include basic elements of dance improvisation, composition, and performance. Students will focus communication through the manipulation of space, time, and energy; healthy use of turn out; articulation of bones and joints; clarity of physical and visual focus; yielding plie into the floor; and efficiency and power of movement.
Style: 15% Small Group Activities, 85% Studio.
Grading: 30% attendance, 70% in-class presentation.

Dance 1010 Modern Dance Technique 3
1-2 credit(s), max credits 4;
Instructor: Pierce, Toni L
Description: This is the third of the tenth-section sequence of modern dance technique. It focuses on beginning modern dance technique training for students prepared for that level of achievement. The dance form varies according to assigned instructor. Successful completion of previous level or departmental approval by audition required for registration.

Dance 1101 Ballet Technique 1
1 credit(s);
Instructor: Wallum, Tina Anderson
Description: This class is the first of two semester sequence of classical ballet technique. Class work is based in the practical application of the principles of classical ballet technique, including body alignment and placement, turn-out, weight distribution, stance, transfer of weight, squareness, counter pull, counter balance, strength, flexibility, coordination, and musicality. Each principle will be introduced in a progression and separately. Class work will consist of barre and center
work with an emphasis on simplicity, repetition and creativity. By the end of the semester students should be able to understand a basic level of vocabulary and be able to execute it with ease and confidence.

Dnce 1110 Ballet Technique 3
2 credit(s), max credits 4;
Instructor: Wallum, Tina Anderson
Description: This class is the first of a two-semester sequence of beginning ballet technique. It is level 3 in an 8 level sequence of ballet technique offered in the dance program. Class work is based on the practical application of ballet technique, including alignment, turn-out, weight distribution, stance, transfer of weight, squareness, counter pull, counter balance, aplomb and balance. Students will integrate these principles intellectually and kinesthetically creating a solid basic ballet technique. Class work will consist of barre work that is needed for center work. Center work will consist of ever changing combinations that practice classical arm positions and movements, learning spatial directions and classical poses, practicing basic turning movements, small and large jumps. This class includes barre, center, petit and grand allegro. By the end of the semester students should be able to execute a beginning level of ballet technique with ease and confidence. Audition for technique placement or departmental approval required for registration.

Dnce 1201 Jazz Technique 1
1 credit(s);
Instructor: Grotting, Karla Kaye
Description: This is the first of a six-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 rhythmic footwork. Improvisation will be introduced as a tool to gain a better understanding of one's movement potential. This course will introduce a general overview of the history of jazz music and dance styles.
Style: 5% Lecture, 5% Film/Video, 90% Laboratory.
Grading: 30% attendance, 30% class participation, 40% other evaluation. 40% achievement and skill

Dnce 1210 Jazz Technique 3
1 credit(s), max credits 2;
Instructor: Grotting, Karla Kaye
Description: This is the third of a six-semester sequence of jazz dance technique/style. This class will introduce vocabulary and develop technical skills using a variety of jazz dance styles while increasing flexibility, groundedness and strength. This will include more complex weight changes, rhythm patterns, changes of direction and balances. Dancers will increase their understanding of musicality, dynamics, style and improvisation and deepen an understanding of the history of jazz music and dance styles, with an emphasis on significant jazz artists.
Style: 5% Lecture, 5% Film/Video, 90% Laboratory.
Grading: 10% reports/papers, 30% attendance, 10% class participation, 50% other evaluation. 50% achievement and skill

Dnce 1301 Tap Technique 1
1 credit(s);
Instructor: Keane, Ellen
Description: Student may contact the instructor or department for information.

Dnce 1313 African Based Movement
1 credit(s);
Instructor: Brown, Patricia
Description: Student may contact the instructor or department for information.

Dnce 1323 Swing Dance
1 credit(s);
Instructor: Rosenthal, Joy Davina
Description: This class will cover the basic footwork, styling, lead and follow techniques of East and West Coast Swing. The emphasis will be on socially danced patterns. Students will understand swing music and the history of each style of Swing dance. Video presentations will be incorporated into each section to inspire students and allow them to visualize what is possible after learning the basics. The semester will culminate in a short performance choreography of both styles of Swing. Dress Code: Students are encouraged to wear comfortable clothing and soft leather soled shoes. Low heels are preferred. Students will show a proficiency of the basic 10 patterns in each dance. Students will show a complete understanding of lead/follow techniques, timing and basic styling.

Dnce 1327 Argentine Tango
OPT No Aud, 1 credit(s);
Instructor: Taccetti, Maria Florencia
Description: This course is an Introduction to Argentine Tango in its social form. The class will cover the basic structure of the dance, the fundamental musicality and the principles of lead and follow. Basic steps and elements will be taught for the students to be able to improvise with their partners from the very beginning and students will learn the art of "The embrace". Students will have to meet weekly to practice between classes.

Style: 5% Lecture, 5% Discussion, 5% Small Group Activities, 5% Student Presentation, 20% Demonstration, 60% Studio. Students have to meet outside of class to practice on a weekly basis.

Grading: 30% attendance, 20% in-class presentation, 50% class participation.

Dnce 1331 Yoga
1 credit(s);
Instructor: Longhi,Kym R
Description: Student may contact the instructor or department for information.

Dnce 1331 Yoga
1 credit(s);
Instructor: Maxwell,Dustin T
Description: This course, while primarily focusing on the physical practice of yoga, will show that yoga is much more than just a physical practice. We will also study the 8-Limbed Path as described by Patanjali over 2000 years ago which offers techniques in addition to yoga postures in order to live a more healthy and vibrant life. The course will begin by giving students a solid understanding of basic yoga postures from which they can begin a more dynamic practice including standing and arm balances, backbends, forward folds and inversions. You will be given simple yet profound breathing techniques, the foundation for a fruitful meditation and basic knowledge of the energetic body including the 7 major chakras. Yoga is for everyone! If practiced mindfully and diligently, yoga will increase strength and flexibility, reduce stress, improve circulation, strengthen the immune system and give an overall sense of well-being. The arc and level of the class is determined based on who is enrolled. The course is approximately 80% physical practice and 20% philosophy. Assignments include keeping a daily journal and a final exam to demonstrate knowledge of basic postures and philosophy.

Dnce 1335 T’ai Chi Ch’uan
1 credit(s);
Instructor: Abdella,Paul Edward
Description: 1. This course will cover: An introduction to the Chinese arts T’ai Chi Ch’uan and Qigong, their practice, history, development, and relevance to contemporary western culture. 2. The learning of a T’ai Chi Ch’uan and Qigong practice. 3. The principles of meditation and stress release through T’ai Chi and Qigong practice. 4. Ways to integrate T’ai Ch’uan and Qigong into daily living and as a life long practice.

Dnce 1343 Hip Hop Movement
OPT No Aud, 1 credit(s);
Instructor: Cottman,Kenna-Camara
Description: Student may contact the instructor or department for information.

Dnce 1349 Contact Improvisation
1 credit(s);
Instructor: Thorson,Morgan
Description: Student may contact the instructor or department for information.

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: Silva Dos Santos, Marciano
Description: African Diasporic Movement 3 is an exploration of Afro-Brazilian dance. This course will develop students’ physical preparedness and body awareness for Afro-Brazilian dance through concentrated warm-ups, and introduce students to the floor work, polyrhythmic movements, turns and jumps, which are characteristic of Afro-Brazilian dance. These exercises will build flexibility, strength, agility, and an understanding of how each section of the body works in conjunction with another. In addition, an emphasis will be placed on understanding the rhythms present in Afro-Brazilian dance, as well as developing concentration, focus and a spiritual presence while performing the movement. The course explores the movements of the Orixas (Orishas) introduced outside of the sacred space of Candomble. A harmonious relationship between the body and percussive sounds will allow students to note the constantly evolving dynamics as they relate to principles such as breath, relaxation and attack, undulation of the body, coordination and rhythm.
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: Brown, Maija Elizabeth
Description: This newly redesigned course is an introduction to global dance forms in society and art. It covers dance forms and significant issues in dance through lecture, discussion, viewing of live and taped performances and movement experiences. The course presents international perspectives on how dance functions in specific cultural contexts and how dance traditions influence each other as cultures come into close contact with one another. The course begins looking at a selection of dance forms from around the world and will end by exploring how these forms come into the United States contributing to creation of the fusion forms that make up American dance. A main objective is for students to develop the aesthetic, cultural and historical awareness needed to form and articulate, verbally and in writing, ideas and opinions about the art of dance. The course will examine a broad-range of dance traditions including: West African, Middle Eastern, South Indian, Japanese dance theater, European folk dance, ballet, Brazilian, North American Plains Indian, and American forms: tap, jazz, hip hop, modern dance and musical theater. By the end of the course students will be able to recognize a variety of dance traditions and connect their historical development to the specific social, artistic and political currents of their culture.

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.

Style: 20% Lecture, 5% Film/Video, 10% Discussion, 10% Small Group Activities, 6% Student Presentation, 5% Field Trips, 40% Studio, 4% Guest Speakers.
Grading: 20% mid exam, 20% reports/papers, 20% additional semester exams, 10% class participation, 30% other evaluation. Other: Dance-making is 15%; Group Performance is 15%
Exam Format: Short answer and Multiple Choice

Dnce 1601 Dance Improvisation
A-F only, 1 credit(s);
Instructor: Mann, Paula
Description: This is the first in a six-part sequence in dance composition. Class work consists of the exploration of the elements of dance improvisation in relationship to the primary elements used in defining movement: space, time and energy. Focus will be placed on using various improvisational exercises to explore and expand personal movement qualities and develop kinesthetic awareness in a variety of contexts. Students learn to develop and trust their own unique relationship to the creative self.

Dnce 1626 Music for Dance
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Kinney, Michelle Marie
Description: In order to understand the global universality of the natural phenomenon of music, this course begins by introducing the physical laws and behavior of sound waves. With the goal of highlighting the depth and complexity of non-western music systems, this course will compare basic western music theory with select global music systems. With an eye on how the world's musical styles and genres, its use and function in society, evolve over time; frequent class discussion focuses on the intersection of music and dance with historic and current states of social/political human dynamics that impact culture, such as diaspora, colonization, xenophobia, and ethnocentrism. Students also examine their own cultural "location", or "cultural gravity" against these backdrops. Practical class work features the study of various methods and styles of collaboration between several composer/choreographer relationships, as well as listening to recordings and watching films of select global genres and forms of music for dance. To encourage personal kinesthetic musical sophistication and further 'open the ears' of students, hands-on experiences include honing rhythmic skills through percussion playing and rhythmic exercises, and participating in a variety of experiential workshops by guest artists representing non-western musical systems.

Dnce 1905 Freshman Seminar: The Politics and Performance of Salsa
A-F only, 3 credit(s);
Instructor: Garcia, Cindy
Description: Over the last few decades salsa has surged across borders of nation, race, and class and has become the dance through which Latinas/os are identified on a global scale. This course considers salsa as latinidad in motion: a marker of social class and ethnic/national/Pan-Latino identity, a sign of cultural solidarity and/or divisiveness, and as a commodity within the context of globalization. Class time is evenly devoted to learning beginning dance techniques of salsa (such as partnering, rhythm, and improvisation) and to the critical discussion of readings and movies. We will develop skills that will enable us to closely analyze dancing bodies, the politics of latinidad, and the social and cultural significations of the different ways people dance salsa. We will also address salsa’s relationship with other social dances associated with latinidad, such as cha cha cha, merengue, and cumbia as well as the work of Chicano choreographer Joel Valentin-Martinez. Come prepared to read, write, dance, and discuss course topics.

Style: 10% Lecture, 10% Film/Video, 15% Discussion, 10% Small Group Activities, 5% Student Presentation, 50% Studio.

Grading: 20% mid exam, 20% reports/papers, 20% special projects, 15% in-class presentation, 25% class participation.

Dnce 3010 Modern Dance Technique 5
2 credit(s), max credits 4;
Instructor: Mann, Paula
Description: This is the fifth of the tenth-section sequence of modern dance technique. It focuses on intermediate modern dance technique training for students prepared for that level of achievement. The dance form varies according to assigned instructor. Successful completion of previous level or departmental approval by audition required for registration.

Dnce 3110 Ballet Technique 5
2 credit(s), max credits 4;
Instructor: Freeh, Penelope Anne
Description: This course leads intermediate students through the tenets and principles of Ballet technique. Utilizing Ballet vocabulary, class work will emphasize body placement/alignment, dynamics, musicality, energy patterns, breath and traversing space. Class will begin at the barre, introducing material that will be elaborated upon and explored in the center. Students will be evaluated/graded upon: -Learning Skills (Responsibility for Own Learning Process, Perseverance, Communication, Commitment to Understanding Tenets and Vocabulary) -Work Ethic (Self-motivation, Self-discipline, Respect for Process of Self and Others) -Physical Skills (Alignment, Coordination, Core Strength, Stamina/Endurance) -Artistic Skills (Musical Awareness, Spatial Awareness, Physical/Energetic Intention, Presence/Focus)

Dnce 3110 Ballet Technique 5
2 credit(s), max credits 4;
Instructor: Sayegh Rodriguez, Abdo
Description: This course is the fifth level of an eight-semester 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 with an understanding of power, energy and space with emphasis on dynamics timings, musicality and fluidity; and a command of ballet terminology. The class will begin at the barre, followed by a period of stretching/core strengthening. Center work will include port de bras, adagio, turns, petite allegro and grande allegro. As the semester progresses, the combinations will become more complex. A constant correlation between barre and center-work will be explored. On occasions, and depending on student needs, floor work will be included to address proper alignment/placement. In order to facilitate improvement, students are expected to learn combinations and to remember personal and general class corrections.
Style: 100% Laboratory.
Grading: 100% class participation.

Dnce 3210 Jazz Technique 5
1 credit(s), max credits 2;
Instructor: Lee, Linda Talcott
Description: This is the fifth of a six-semester sequence of jazz dance technique/style. Class work will concentrate on the development of a clear understanding of the eclectic range of jazz dance and its various styles including musical theatre dance, Latin dance, lyrical jazz dance and contemporary jazz dance. In addition to the established techniques from the previous levels, focus will be placed on vertical balance, 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.

Dnce 3301 Tap Technique 3
1 credit(s);
Instructor: Keane, Ellen
Description: Student may contact the instructor or department for information.

Dnce 3311 Contemporary Indian Dance 1
OPT No Aud, 1 credit(s);
Instructor: Chatterjea, Ananya
Dnce 3344 Introduction to Dance/Movement Therapy  
2 credit(s);  
Instructor: Nordstrom-Loeb, Barbara E  
Description: The first semester of a year-long technique sequence, this is a relatively advanced level technique class based on the Odissi classical style of Indian dance, the martial movement form Chhau, and iyengar style yoga. This course focuses intensely on establishing the base of the classical Odissi vocabulary, with specific focus on body positions (mandala), walks (chaali), jumps (utplavana), and turns (bhramari). We will also briefly examine the history of the Odissi dance form. Working with this technique, we will proceed through progressive work on several principles: footwork, understanding of hip flexion, torso movement (bakshya chalana), mudras (hand gestures), breath work, and rhythmic complexity.  
Style: 10% Lecture, 10% Discussion, 80% Laboratory. Students are encouraged to attend dance concerts related to the course material presented in the community.  
Grading: 25% attendance, 10% journal, 5% reflection paper, 40% class participation, 10% problem solving, 10% other evaluation. 10% of the grade is students’ ability to problem-solve movement specificities in accordance with their structural particularities. 10% of the grade is students’ ability to gain familiarity with the movement terminology introduced in class.

Dnce 3337 Body Mind Centering  
2 credit(s);  
Instructor: Fargnoli, Margaret  
Description: Body-mind Centering is the study of embodied consciousness. It is an epistemology grounded in the first person exploration of direct experience that expands our understanding of how knowledge is created. It offers a methodology that reveals now the mind and body are indissolubly linked and how the body generates states of consciousness that influences and unconsciously controls feelings, thoughts and actions. Class work includes guided movement somatizations, hands-on touch and re-patterning exercises and traditional representational anatomy. Together these elements lead students into the direct experience of how the mind expresses itself through the body’s systems, tissues and cells. In this course we specifically focus on the Skeletal, Organ, Fluids and Nervous systems. In addition we study the Basic Neurological Patterns (the movement of babies and toddlers) that underlie more complex adult movement and establish the infrastructure for how we perceive and respond to the world.

Dnce 3351 African Diasporic Movement 5  
OPT No Aud, 1 credit(s), max credits 2;  
Instructor: Cottman, Kenna-Camara  
Description: This course will develop students’ knowledge of the West African technique through traditional dances that were collected and performed by nationalized and private dance companies of West Africa during the 1950’s and continuing through today. Students will learn the Basic story behind the creation of dance companies such as Les Ballets Africains. -Purpose and accompaniment for traditional instruments. -Technique of West African dance. -Cultural foundations/Oral traditions upon which the dances are based. In DANCE 3351, students will continue the practice by working on more complex and challenging rhythms, instrumentation, and cultural information. More non-Malinke based forms will be introduced, such as Senegalese Sabar, Liberian, Congolese, and other Southern African forms. The class will be a rigorous practice. All classwork will come directly from the African techniques. Students will complete readings, view and discuss video, and complete some performative/community aspect of the technique/culture. Contemporary/Modern dance conventions will not be utilized in this class. The cardiovascular endurance of students will improve as a result. Live drummers will be used in the course, and students can expect to learn drum parts to enhance the understanding of the rhythms.  
Style: 5% Lecture, 10% Discussion, 75% Laboratory, 10% Demonstration.  
Grading: 30% attendance, 20% class participation, 50% laboratory evaluation.

Dnce 3401W Dance History 1  
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive  
Instructor: Larasati, Rachmi Diyah  
Description: This course explores the historiography of dance in Asia, Middle East and Africa during the twentieth century through the present. We will focus on how performance and the reconstruction of dance practices relates to the context of patronage under traditional formation of state, colonialism and globalization. The staging of dance, and the artistic and aesthetic choices influenced by this complex history, cannot be separated from the terrain of body and politics in which they were created. From this theoretical perspective, we will explore and analyze negotiations among practitioners, which often reclaim and disclaim specific historical paths (for example: national dance, court dance, folk dance and contemporary dance). The course examine how the changing political terrain manifests through dance. We will also examine the pros and cons of the dance archive, how different primary and secondary sources such as literature, video, photographs, and other original documents capture dance as an ephemeral form. It examine how the political economy of dance practices influences the negotiation of their ownership, circulation, and distribution.  
Style: 30% Lecture, 30% Film/Video, 10% Discussion, 5% Small Group Activities, 10% Student Presentation, 5%
Dance 3621 Dance Production I
A-F only, 2 credit(s);
Instructor: Courtright, Anthony E
Description: In this year-long survey course, students will be introduced to a wide range of technical and administrative skills necessary for successfully producing dance. Coursework culminates in a group-produced live performance event in the spring semester. The economics of live performance are such that the majority of performing artists will produce their own work in various ways throughout their careers. This course is designed as a fundamental overview of the craft of producing live dance. It is intended to prepare students for future study in the technical and administrative aspects of a creative career by providing a basic understanding of both the 'big picture' as well as many of the individual production elements that comprise live dance. Topics introduced include: understanding the role of producer; developing mission and vision; defining an artistic 'brand'; budgeting and introduction to basic business management for the arts; fundraising & grant writing; marketing and press relations; hiring and contracting production staff; stage management & lighting for dance; costuming; sound; front of house. The intention is to build a common vocabulary and create sufficient basic awareness of the major production elements in order to effectively facilitate communication between and coordinate the efforts of those elements. Great emphasis is placed upon both the practical application of skills acquired in the classroom, as well as on building effective collaborative relationships among all production team members as they work together to produce actual dance events.

Dance 3602 Dance Composition 2
3 credit(s);
Instructor: Mann, Paula
Description: This is the third in a six-part sequence in dance composition and builds upon coursework in the first two parts of the Composition Sequence. Class work consists of learning the tools to create dances that express a personal vision, have developed integrity of form and structure and focus on student's individual movement vocabulary. Improvisation, solo studies and duet studies will be explored to cultivate integrity of form and structure. Students will develop abilities as active observers with the goal of honing their dance direction and rehearsal methodologies. An understanding and appreciation of the creative process and its application to ones' self and other art forms will also be discussed and implemented through assignments in movement and writing.

Dance 3602 Dance Composition 2
3 credit(s);
Instructor: Bergeron, Maggie Marie
Description: This is the third in a six-part sequence in dance composition and builds upon coursework in the first two parts of the Composition Sequence. Class work consists of learning the tools to create dances that express a personal vision, have developed integrity of form and structure and focus on student's individual movement vocabulary. Improvisation, solo studies and duet studies will be explored to cultivate integrity of form and structure. Students will develop abilities as active observers with the goal of honing their dance direction and rehearsal methodologies. An understanding and appreciation of the creative process and its application to ones' self and other art forms will also be discussed and implemented through assignments in movement and writing.

Dance 3487W Dance and Citizenship: Land, Migration, and Diaspora
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Larasati, Rachmi Diyah
Description: This course is a study of political economy of culture, dance and performance as practiced and transformed by minority groups in the United States, Europe, Middle East, Africa and Asia. Emphasis is on migration as a sociopolitical, economic, and global phenomenon, particularly pertaining to land and water/ocean disputes, labor distribution, political tension, asylum/refugee, and dis-placement/dis-location. In this class students are invited to investigate the nature of so-called ethnic (immigrant) practices and diaspora in the context of the politics of transmission, internal and external cultural exchange and "multiculturalism." The course addresses the socio historical perspective of diasporic performance and dance as practiced, developed and performed in the context of the global North and many other locations. The course will also examine dance and performance as practiced and transformed by Native Americans and minority groups in the United States, who are marked as the "ethnic minority body".
Style: 25% Lecture, 25% Film/Video, 25% Discussion, 10% Small Group Activities, 5% Field Trips, 10% Guest Speakers.
Viewing life performances -cost free-required
Grading: 20% mid exam, 20% final exam, 10% reports/papers, 5% special projects, 20% attendance, 15% reflection paper, 10% class participation.
Exam Format: final paper, mid term are in the form of papers special project and reflection paper are in the form of book review, journal and performances review.

Dance 3621 Dance Production I
A-F only, 2 credit(s);
Instructor: Courtright, Anthony E
Description: In this year-long survey course, students will be introduced to a wide range of technical and administrative skills necessary for successfully producing dance. Coursework culminates in a group-produced live performance event in the spring semester. The economics of live performance are such that the majority of performing artists will produce their own work in various ways throughout their careers. This course is designed as a fundamental overview of the craft of producing live dance. It is intended to prepare students for future study in the technical and administrative aspects of a creative career by providing a basic understanding of both the "big picture" as well as many of the individual production elements that comprise live dance. Topics introduced include: understanding the role of producer; developing mission and vision; defining an artistic "brand"; budgeting and introduction to basic business management for the arts; fundraising & grant writing; marketing and press relations; hiring and contracting production staff; stage management & lighting for dance; costuming; sound; front of house. The intention is to build common vocabulary and create sufficient basic awareness of the major production elements in order to effectively facilitate communication between and coordinate the efforts of those elements. Great emphasis is placed upon both the practical application of skills acquired in the classroom, as well as on building effective collaborative relationships among all production team members as they work together to produce an actual dance event.
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: 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. From this perspective, the course also explores the complex relationship between
social choreographies? and ?stage choreographies? and the possibilities, within dance, to shape/impact socio-cultural
constructs.
Style: 40% Lecture, 10% Film/Video, 30% Discussion, 5% Laboratory, 5% Small Group Activities, 10% Student
Presentation.
Grading: 35% reports/papers, 25% special projects, 10% attendance, 20% journal, 10% class participation.

Dnce 4602 Dance Composition 4
3 credit(s);
Instructor: Flink, Carl Lindsay
Description: This course is the fifth course in the University of Minnesota Dance Program's six-part dance composition
sequence. Building on the learning outcomes from the Dance Composition 3 course, class work consists of deepening
exploration and structuring of dances for groups. This course also focuses on expanding each student's toolbox of
choreographic strategies. The primary goal is for students to delve into and further refine their personal artistic voice.
Effective methods for conducting rehearsals, developing leadership skills, and providing feedback to other artists and
collaborators is also examined and discussed.
Style: 20% Lecture, 25% Discussion, 30% Laboratory, 25% Student Presentation.
Grading: 20% attendance, 20% class participation, 60% other evaluation. 60% of evaluation is based on the process and
outcome revealed during each student's creation of the two required dance composition studies.

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: Smith, Joan A
Description: Senior seminar is a yearlong, process-driven project required for graduation by the College of Liberal Arts.
Seniors will execute and thoroughly document a sustained project of their own design over the course of a year. Projects
may take of the form of, but are not limited to: a research paper, an internship with an arts organization, creation of an
original work: play, dance, lighting, set design, sound score, etc., grant writing, portfolio development and presentation,
educational curriculum development, film and/or software projects. A faculty adviser will serve as a resource in the planning
stages, advise on the progress of the project, and evaluate its effectiveness and quality (including the quality of reflections
on risky, noble failures). Ideally this will serve as the "capstone" college experience bringing together several years of
coursework and productions in theater arts and dance, and preparing you for life and work after departing the University of
Minnesota.
Style: 20% Discussion, 80% Student Presentation. Class meetings are comprised of discussion of potential senior projects
and their viability. The other part of class time is taken up with student presentations of their works in progress.
Grading: 20% attendance, 20% class participation, 60% other evaluation. 60% of the S/N grade is determined by the
quality of the initial formal project proposal, the final project and written reflections.
Exam Format: N/A

Dnce 5010 Modern Dance Technique 7
2 credit(s), max credits 4;
Instructor: Pierce, Toni L
Description: This is the seventh of the tenth-section sequence of modern dance technique. It focuses on advanced
modern dance technique training for students prepared for that level of achievement. The dance form varies according to
assigned instructor. Successful completion of previous level or departmental approval by audition required for registration.

Dnce 5110 Ballet Technique 7
1 credit(s), max credits 2;
Instructor: Leon, Barry D
Description: Student may contact the instructor or department for information.

Dnce 5334 Introduction to Dance/Movement Therapy
2 credit(s);
Instructor: Nordstrom-Loeb, Barbara E
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. From this perspective, the course also explores the complex relationship between social choreographies? and ?stage choreographies? and the possibilities, within dance, to shape/impact socio-cultural constructs.  
Style: 40% Lecture, 10% Film/Video, 30% Discussion, 5% Laboratory, 5% Small Group Activities, 10% Student Presentation.  
Grading: 35% reports/papers, 25% special projects, 10% attendance, 20% journal, 10% class participation.

Dnce 5500 Topics in Dance: Modern Dance Technique 9  
2 credit(s), max credits 10, 10 completions allowed;  
Instructor: Flink, Carl Lindsay  
Description: These are the ninth & tenth segments of a ten-section sequence of modern dance technique. Class work is based on practical application of principles of space, time and energy focusing on alignment, weight, momentum, power from the pelvic center, joint rotation, muscle tone, skeletal articulation, clarity of focus and intent, flexibility, strength, stamina and energy flow and lines through the use of breath. Successful completion of previous level or departmental approval by audition required for registration.

Dnce 5500 Topics in Dance: Modern Dance Technique 9  
2 credit(s), max credits 10, 10 completions allowed;  
Instructor: Thompson, Erin D  
Description: These are the ninth & tenth segments of a ten-section sequence of modern dance technique. Class work is based on practical application of principles of space, time and energy focusing on alignment, weight, momentum, power from the pelvic center, joint rotation, muscle tone, skeletal articulation, clarity of focus and intent, flexibility, strength, stamina and energy flow and lines through the use of breath. Successful completion of previous level or departmental approval by audition required for registration.

Dnce 5500 Topics in Dance: Dance Citizenship: Land Migration and Diaspora  
3 credit(s), max credits 10, 10 completions allowed;  
Instructor: Larasati, Rachmi Diyah  
Description: Student may contact the instructor or department for information.

Dnce 5700 Performance  
1 credit(s), max credits 4, 4 completions allowed;  
Instructor: Pierce, Toni L  
Description: DNCE 5700 provides a pre-professional performance experience for students and fulfills a portion of the performance credit requirement needed for completion of the BA and BFA degrees in Dance. Students learn and rehearse works created or restaged by Cowles Visiting Guest Artists and Dance Program faculty under the direction of an Artistic Director chosen from the Dance Program faculty. Casting is done through audition. Dance works are presented in a university or professional venue with full production values. Students must be in attendance and on time for all rehearsals, technical rehearsals, and performances. DNCE 5700, in practice, refers to the Dance Program’s University Dance Theater though credits earned in this course need not be limited to that production.

Dnce 5858 Teaching Dance  
4 credit(s);  
Instructor: Bergeron, Maggie Marie  
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: This is an independent study project where the faculty instructor and student agree upon a particular research area, methodologies, and outcomes, based on the students’ interests.  
Style: This is organized in discussion between the instructor and student.  
Grading: This is agreed upon in discussion and depending upon the course of study decided.
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." W.B. Saunders 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  
Description: Anatomical structures of the head and neck as they relate to the practice of dental hygiene. Teaching methods include lecture, self-directed study using a CD-ROM, discussion. Textbooks: M. Fehrengach and S. Herring: "Illustrated Anatomy of the Head and Neck." W.B. Saunders. Course only open to students enrolled in the Program in Dental Hygiene.  
Style: CD-ROM  
Exam Format: Multiple choice

DH 3120 General and Oral Pathology  
A-F only, 2 credit(s);  
Instructor: Blue, Christine M  
Description: Student may contact the instructor or department for information.

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: <html> <p>COURSE PURPOSE</p> <p>The purpose of this course is to assist students in learning a systematic evaluation of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinuses; and manifestations of systemic diseases in jaws and associated structures. The course also assists the students to understand the biologic effects of radiation on cellular, tissue and organ levels. In addition, the course introduces advanced imaging modalities as used in dentistry.</p> <p>COURSE OBJECTIVES</p> <ol> <li>Biological effects of ionizing radiations. To present an overview of biological effects of ionizing radiations to include: mechanisms of biological damage, effects of radiation at cellular and tissue levels, factors affecting observable responses, factors in the risk estimation with special reference to dental diagnostic radiography and radiation use controversy.</li> <li>Intraoral and extraoral radiographic anatomy. Describe and demonstrate a conceptual approach to learning anatomic landmarks.</li> <li>Basic concepts of advanced imaging. To acquaint the students with concepts and principles of specialized radiographic techniques useful, but not widely used in dentistry. The topics include: cone beam computed tomography, computed tomography, MRI, nuclear medicine and use of contrast media.</li> <li>Radiographic Interpretation: to interpret radiographic findings including: </li> </ol> <ul> <li>recognize...
radiographic evidence of deviations from normal, listed in the specific objectives of each unit. 

- Identify and describe the nature of anomalies as recorded in radiographs.
- List the anomalies which may have similar radiographic characteristics, i.e., process of making differential radiographic interpretation.
- Apply the concepts and specific criteria in isolating the disease process to a minimum number of possibilities.
- Correlate the radiographic evidence with other diagnostic procedures for the purpose of arriving at a tentative or final diagnosis.

**Grading:** 100% other evaluation. Periodic quizzes, class exercises, and three exams will be given.

**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:** Quick, Karin
- **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
- **Description:** Student may contact the instructor or department for information.

**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.

**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 learning a systematic evaluation of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and
The course also assists the students to understand the biologic effects of radiation on cellular, tissue and organ levels. In addition, the course introduces advanced imaging modalities as used in dentistry.

**COURSE OBJECTIVES**

1. Biological effects of ionizing radiations. To present an overview of biological effects of ionizing radiations to include: mechanisms of biological damage, effects of radiation at cellular and tissue levels, factors affecting observable responses, factors in the risk estimation with special reference to dental diagnostic radiography and radiation use controversy.

2. Intraoral and extraoral radiographic anatomy. Describe and demonstrate a conceptual approach to learning anatomic landmarks.

3. Basic concepts of advanced imaging. To acquaint the students with concepts and principles of specialized radiographic techniques useful, but not widely used in dentistry. The topics include: cone beam computed tomography, computed tomography, MRI, nuclear medicine and use of contrast media.

4. Radiographic Interpretation: to interpret radiographic findings including:
   - Recognize radiographic evidence of deviations from normal, listed in the specific objectives of each unit.
   - Identify and describe the nature of anomalies as recorded in radiographs.
   - List the anomalies which may have similar radiographic characteristics, i.e., process of making differential radiographic interpretation.
   - Apply the concepts and specific criteria in isolating the disease process to a minimum number of possibilities.
   - Correlate the radiographic evidence with other diagnostic procedures for the purpose of arriving at a tentative or final diagnosis.

**Grading:** 100% other evaluation. Periodic quizzes, class exercises, and three exams will be given.

**DT 3251 General and Oral Pathology**
A-F only, 2 credit(s);
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.

**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: Aparicio PhD, Conrado
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
DT 3434 Operative Dentistry II for the Dental Therapist, Lecture
A-F only, 1 credit(s);
Instructor: Phair, Craig B
Description: The purpose of this course is to provide a foundation of knowledge that is necessary for restoring individual teeth exhibiting moderate to extensive destruction resulting from dental caries. The principles, rationale, technique for and indications, contraindications, advantages, and disadvantages of restoring these lesions with dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin will be presented.
Grading: 35% mid exam, 45% final exam, 20% quizzes.

DT 3471 Prosthodontic Topics for Dental Therapy
S-N only, 2 credit(s);
Instructor: Cook, Gary Eugene
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: Quick, Karin
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
Description: Student may contact the instructor or department for information.

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 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
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 5231 Oral and Maxillofacial Radiology II
A-F only, 1 credit(s);
Instructor: Ahmad, Mansur
Description: COURSE PURPOSE
The purpose of this course is to assist students in learning a systematic evaluation of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinuses; and manifestations of systemic diseases in jaws and associated structures. The course also assists the students to understand the biologic effects of radiation on cellular, tissue and organ levels. In addition, the course introduces advanced imaging modalities as used in dentistry.

COURSE OBJECTIVES
1. Biological effects of ionizing radiations. To present an overview of biological effects of ionizing radiations to include: mechanisms of biological damage, effects of radiation at cellular and tissue levels, factors affecting observable responses, factors in the risk estimation with special reference to dental diagnostic radiography and radiation use controversy.
2. Intraoral and extraoral radiographic anatomy. Describe and demonstrate a conceptual approach to learning anatomic landmarks.
3. Basic concepts of advanced imaging. To acquaint the students with concepts and principles of specialized radiographic techniques useful, but not widely used in dentistry. The topics include: cone beam computed tomography, computed tomography, MRI, nuclear medicine and use of contrast media.
4. Radiographic Interpretation: to interpret radiographic findings including:
   a. recognize radiographic evidence of deviations from normal, listed in the specific objectives of each unit.
   b. identify and describe the nature of anomalies as recorded in radiographs.
   c. list the anomalies which may have similar radiographic characteristics, i.e., process of making differential radiographic interpretation.
   d. apply the concepts and specific criteria in isolating the disease process to a minimum number of possibilities.
   e. correlate the radiographic evidence with other diagnostic procedures for the purpose of arriving at a tentative or final diagnosis.

Grading: 100% other evaluation. Periodic quizzes, class exercises, and three exams will be given.

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 5251 General and Oral Pathology
A-F only, 2 credit(s);
Instructor: Blue, Christine M
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 5321 Treatment Planning for the Dental Therapist
S-N only, 1 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: Aparicio PhD, Conrado  
   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: <html>  
   COURSE PURPOSE: The purpose of this course is to provide a foundation of knowledge that is necessary for restoring individual teeth exhibiting moderate to extensive destruction resulting from dental caries. The principles, rationale, technique for and indications, contraindications, advantages, and disadvantages of restoring these lesions with dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin will be presented.  
   COURSE OBJECTIVES:  
   The student will be able to list the principles and rationale for the preparation and restoration of moderate to large caries lesions when utilizing dental amalgam, intracoronal and partial veneer cast gold, porcelain, and composite resin.  
   The student will be able to describe the technique for the preparation and restoration of moderate to large caries lesion when utilizing dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin. The student will be able to list advantages and disadvantages of dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin when restoring moderate to large caries lesions. The student will be able to list the indications and contraindications for restoring moderate to large caries lesions with dental amalgam, intracoronal and partial veneer cast gold, porcelain, and composite resin.  
   Grading: 35% mid exam, 45% final exam, 20% quizzes.  
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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: Cook, Gary Eugene
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: Quick, Karin
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
S-N only, 1 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
   A-F 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 7123 Temporomandibular Disorders and Orofacial Pain
   S-N only, 1 credit(s);
   Instructor: Nixdorf, Donald R
   Description: Student may contact the instructor or department for information.

Dent 7220 Prosthetically-Driven Implant Surgery and Treatment Planning
   S-N only, 1 credit(s);
   Instructor: Conrad, Heather Joan
   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: Grothe, Ronald
   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 Orofacial Pain Disorders
   A-F only, 3 credit(s);
   Instructor: Schiffman DDS, MS, Eric L
   Description: Student may contact the instructor or department for information.

Dent 8121 Current Literature in TMD and Orofacial Pain
   A-F only, 1 credit(s);
   Instructor: John, Mike Torsten
   Description: Student may contact the instructor or department for information.
Design

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 1101v 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% 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.

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: 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: 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 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. <br> <a href="http://www1.umn.edu/urelate/newsservice/Multimedia_Videos/creative_class.htm" target="new">Video of class activities. . .</a></p>
<p><b>It sounds like... </b><a href="http://hokanson.design.umn.edu/creativity/CreativeProblemSolvingMusic.mp3&autoplay=0" target="new">Video of class activities. . .</a></p>
<p><b>Note: Students from all areas of study are encouraged to enroll in the class.</b></p>
<b>Style: </b>20% Lecture, 20% Discussion, 10% Laboratory, 20% Small Group Activities, 10% Demonstration, 5% Field Trips, 10% Guest Speakers, 5% Web Based.

<b>Grading: </b>10% mid exam, 60% special projects, 10% attendance, 20% reflection paper.

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**Des 1111H Honors: 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. <br> <a href="http://www1.umn.edu/urelate/newsservice/Multimedia_Videos/creative_class.htm" target="new">Video of class activities. . .</a></p>
<p><b>It sounds like... </b><a href="http://hokanson.design.umn.edu/creativity/CreativeProblemSolvingMusic.mp3&autoplay=0" target="new">Video of class activities. . .</a></p>
<p><b>Note: Students from all areas of study are encouraged to enroll in the class.</b></p>
<b>Style: </b>20% Lecture, 20% Discussion, 10% Laboratory, 20% Small Group Activities, 10% Demonstration, 5% Field Trips, 10% Guest Speakers, 5% Web Based.

<b>Grading: </b>10% mid exam, 60% special projects, 10% attendance, 20% reflection paper.

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**Des 1202 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.

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**Des 1715 Design and Food**

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

**Instructor:** Kudowitz, Barry

**Description:** This class is a hands-on introduction to principles of creativity and design viewed through the lens of food. Students will experiment and design with food to learn skills related to product design, graphic design, interaction design, designed environments, creativity and critique. The class is divided into five three-week "courses". Each course focuses on a different design theme as applied to food. Local chefs will be involved in some lectures and labs to provide insight and connection the culinary arts and restaurant industry. The class meets Monday and Wednesday from 935-1130. Mondays are lectures and Wednesdays are hands-on labs.
Des 1902 Freshman Seminar: Housing Matters  
A-F only, 3 credit(s), max credits 9, 3 completions allowed; Meets CLE req of Diversity and Soc Justice US  
Instructor: Yust, Becky L  
Description: Student may contact the instructor or department for information.

Des 1905 Freshman Seminar: Building Vision  
A-F only, 3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Fogg, Monica  
Description: This FRESHMAN SEMINAR aims to break down barriers and fears while developing processes toward new ways of seeing. We will explore creativity-without-judgment, giving people of diverse skill levels a chance to tap into creative processes. Through weekly exercises in visual story-telling, participants will sharpen their ability to see (the real world as well as the imagined.) Projects are constructed to challenge perceived personal limitations and to build a way of communicating in a visual manner. We will look at left-brain and right-brain influences, their role in the information age, how/why right brain skills are increasingly important in preparing for success. Students will cultivate right-brain skills (impacting work, talent and future.) This seminar is for individuals interested in expanding ways of seeing, thinking and doing. It includes: lectures, demonstrations, classroom activities, field trips and homework. Various media (pencil, pen, pastel, watercolor) will be used to build a visual journal. Students need not be skilled, just willing. Laughter is a guaranteed part of the process. Reading is light, content not dense. 10-20 pages per week.

Des 1910W Freshman Seminar  
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive  
Instructor: Boyd Brent, James W  
Description: Student may contact the instructor or department for information.

Des 2101 Design and Visual Presentation  
A-F only, 3 credit(s);  
Instructor: Fogg, Monica  
Description: Design and Visual Presentation has two basic goals: 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. Course materials, lectures, and project submissions will be online with one 1-hour assisted lab session (optional) per week. In addition, students will submit 3 hard copies during the semester. On the First Friday of the semester, there is one OPTIONAL meeting in classroom, for those who want to meet instructors and ask questions in person at the start of the semester. 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. Coursework consists of readings, exercises as well as online presentations, quizzes and discussions.  
Style: It is expected that, between online learning (lectures, discussions), and project development, students will work approximately 8-9 hours per week.

Des 3131 User Experience in Design  
A-F only, 4 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 3160 Topics in Design: Characters, Worlds, and Immersive Experiences  
A-F only, 3 credit(s), max credits 24, 6 completions allowed;  
Instructor: Schwartzman, Robin Nicole  
Description: Student may contact the instructor or department for information.
Des 3201 Career and Internship Preparation for Design
A-F only, 1 credit(s);
Instructor: Rechtzigel MS,Dana
Description: This class is ideal for undergraduate students in Design majors or minors 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 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: 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.
Grading: 55% reports/papers, 25% special projects, 5% attendance, 10% class participation, 5% other evaluation.

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're 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.
Grading: 46% reports/papers, 46% special projects, 5% attendance, 10% class participation.

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: The primary emphasis of this class will be a survey of the letterforms that brought us our modern alphabet. We'll focus on early writing cultures and follow the development of the written and printed word. We'll identify the primary writing systems used by Chinese, Egyptian, Sumerian, Greek and Roman cultures. We'll understand how the writing of Medieval manuscripts evolved into movable type. You'll learn to identify how movable type evolved after the introduction of the printing press. You'll have a chance to learn to set type and print using traditional printing presses. We'll divide our semester into 3 phases of study. Phase 1 begins with the ancient writing cultures: Sumer, Egypt and China, we'll explore how the process of writing began. Focusing on primary source artifacts we'll investigate writing's role in society by looking at actual examples of cuneiform, sarchophogi and Chinese calligraphy. Phase 2 will encompass the Levantine alphabets. These are the writing systems of the Phonecian, Greek, Etruscan and Roman cultures. It is the emergence of true alphabets that make these cultures especially important to our current writing system. Also in phase 2 we'll discuss the
Des 3321 Furniture Design: Exploration
A-F only, 3 credit(s);
Instructor: Oliphant, Thomas Arthur
Description: Des3321 Furniture Design: Exploration Course Description Furniture moderates our environment as a collective expression of individual needs. As example: we may share the same chair, but never the same body, time, and space. And, despite our needs being individual, the resulting collective expression of sitting is remarkably common in cultural. This seminar explores the inclusive, egalitarian nature of furniture and furniture design. It provides a foundation of understanding for those serious to buy, sell, design or study 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. Student Learning Outcomes This course develops analytical, reflective and persuasive skills in assigning the following out-of-class work: 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. Through class participation, field trips, guests and open discussion, this course develops insight and knowledge of the following topics: Design Criteria: structural and intrinsic integrity 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 Required and Recommended Materials The course text is comprised of the following and available at the Coffman Bookstore: "Commodity & Delight", from "Home: A Short History of the Idea". Witold Rybczynski. Penguin. (pgs 77-99) "Organic Design in Home Furnishings". Elliot Noyes. The Museum of Modern Art, New York / Arno Press 1941, 1969. (pgs 5-17) "Q&A of Charles Eames by Madame L. Amic of the Musee des Arts Decoratifs, Paris", from "Eames Design". Marilyn & John Neuhat & Ray Eames. Harry N. Abrams, Inc. 1989. "The Eames Team". Paul Goldberger. New Yorker, May 24, 1999. (pgs 92-99) "Mechanization Takes Command". Siegfried Giedion. Oxford Press-out of print. 1987. (pgs 258-510) "The Seat of the Soul". Arthur Danto. Essay from "397 Chairs". Harry N. Abrams, Inc. 1988. (pgs 8-16) Additionally, locate and purchase by mid term: "The Chair". Galen Cranz. WW Norton. (pgs 21-147)

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.

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-clad stadiums. In this course, students will learn about new materials - such as high-tech fabrics, foils, electrotexiles, and so-called "intelligent textiles" that respond to environmental stimuli - through hands-on materials research and testing of prototypes. Cross-disciplinary student teams will explore "appropriate use" modeling and applications, testing their design ideas through several quick one-week projects, leading to a larger, more integrated project at term’s end. Seminar instructor: Bruce Wright, Editor, Fabric Architecture magazine.

Des 4165 Design and Globalization
A-F only, 3 credit(s); Jr or sr credit will not be granted if credit already received for: DHA 4165 or 5165 Credit will not be granted if credit has been received for: DES 5165; Meets CLE req of Diversity and Soc Justice US
Instructor: Hadjiyanni, Tasoulla
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. EBD is increasingly discussed in design practice as a design process approach to determine a design solution that is based in evidence. Selection of design consultants frequently rests on their ability to provide evidence that a design solution will have certain outcomes. However, how does the design practitioner prove? that the design of the new office can increase productivity, providing access to a healing garden accelerate discharge rates from the hospital, the design of the new classrooms increase student learning, the design of a Web site increase its use, the creation of a graphic identity system improve wayfinding through a building, or application of specialized textiles facilitate comfort and durability? EBD is being touted by those engaged in this project approach as a means by which to identify evidence that a specific design decision will result is a specific, measurable outcome. Others are simply claiming engagement in EBD as a marketing tool. This course will enable students to define and understand EBD principles, identify EBD tools, and engage in EBD via application of knowledge gleaned from the course directly applied to a project in their areas of expertise. Moreover, the course will empower students to determine if application of the EBD process is appropriate for their personal practices or application by their firms. Documenting their design approach using EBD principles will also allow students to gain experience with this process and assist other practitioners in understanding EBD.
Style: 30% Lecture, 40% Discussion, 10% Small Group Activities, 15% Student Presentation, 5% Guest Speakers.
Grading: 75% reports/papers, 5% special projects, 5% reflection paper, 15% in-class presentation.
Des 5170 Topics in Design: Product Design for Athletes  
A-F only, 1 credit(s), max credits 8, 8 completions allowed;  
Instructor: Sokolowski, Susan L  
Description: Student may contact the instructor or department for information.

Des 5201 Career and Job Search Preparation for Graduate Students  
S-N only, 1 credit(s);  
Instructor: Kubak, Maggie  
Description: Student may contact the instructor or department for information.

Des 8102 Quantitative Research Methods  
A-F only, 3 credit(s);  
Instructor: Johnson PhD, Kim KP  
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: Oleary, Heather Elaine  
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.

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 (DDS 6112) is a two-credit course that 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 (DDS 6111) during Summer Semester. Periodontology Technique curriculum will provide practical lab and clinical experiences to allow the student to attain beginner skills in evaluation, prevention, and non-surgical treatment of gingival and periodontal disease. This course is in the beginning of the student's accumulation of knowledge and laboratory skills brought into a true clinical setting. Students participating as patients help the student operator to develop not only basic periodontal instrumentation techniques but also skills in communication, time utilization, documentation, infection control and professionalism. In addition, these clinical experiences enhance the student's confidence and comfort levels for future patient encounters. Grading: 25% mid exam, 25% final exam, 50% other evaluation. 50% Final Clinical Competency Examination Also includes completion of five pass/fail skill assessments in lab/clinic.

DDS 6141 Pediatric Dentistry Clinic  
A-F only, 3.6 credit(s);  
Instructor: Yesil, Jasmine  
Description: DDS 6141/DT 4141 is designed as a survey of the clinical encounters in Pediatric Dental Care. The purpose of this course is to re-emphasize basic information regarding early childhood development and care for children that does require foundation knowledge and competence in clinical dentistry. You should complete this course with a basic clinical understanding of: Pediatric Dentistry as a career and specialty, Growth and development, Development of the primary dentition and the transitional dentition, Dental anatomy and anomalies, Dental caries process, prevention and treatment, Introduction of children to their first dental visit, Basic behavior management, Pain and anxiety management for the child and adolescent, Radiographic techniques commonly used for children and adolescents, Sealants, resins, amalgams, and stainless steel crowns, Pulp diagnosis and treatment, Interceptive Orthodontics and space maintenance, Dental trauma, Minor Pediatric oral lesions, Common emergencies for children and adolescents, Pediatric and adolescent problem solving and treatment planning. Upon completion of this course, the student will be able: To emerge with an understanding of dental care for children and adolescents at the level of a general dentist/dental therapist, including caries risk management. To be able to provide complete disease control management for a child or adolescent. To formulate a comprehensive diagnosis/assessment, treatment and
Grading: Attendance - 10% Supplemental Learning Activities - 10% Revised Clinical Competencies - 50% Written Exam - 15% OSCE Exam - 15%

**DDS 6152 Oral and Maxillofacial Surgery I**
A-F only, 1.1 credit(s);
Instructor: De Felippes, Nanci Lara

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. Upon completion of the course, the student will understand the basic principles of:

- Knowledge of the scope of the specialty of Oral and Maxillofacial Surgery
- Evaluation and management of the surgical patient
- Principles of surgery and wound healing
- Armamentarium for office dentoalveolar surgery
- Principles and techniques of exodontia
- Postoperative patient care
- Biopsy techniques
- Basic preprosthetic surgery
- Maxillofacial infections
- Surgical management of impacted teeth
- Informed consent for Oral and Maxillofacial Surgery procedures
- The management of complications occurring secondary to dentoalveolar surgery
- Evaluation of benign and malignant lesions commonly presenting in the oral cavity
- The management of soft tissue and dentoalveolar injuries.

Grading: 40% mid exam, 60% final exam.

**DDS 6171 Orthodontics I**
A-F only, 2.7 credit(s);
Instructor: De Felippes, Nanci Lara

Description: To introduce the undergraduate dental student to the area of dentistry concerned with the supervision, guidance, and correction of the growing or mature dentofacial structures. In this course the relevant areas of orthodontics will be introduced including: growth and development of the craniofacial structures, diagnostic methods, biology of tooth movement and biomechanics, and clinical diagnosis and treatment planning.

- To provide practical experience in cephalometrics and study model analysis, as well as in the fundamentals of orthodontic appliances construction, wire bending, and fixed appliances debonding.
- COURSE OBJECTIVES
  - Gain an understanding of normal and abnormal growth and development in the deciduous, mixed and permanent dentitions.
  - Understand the etiology of various malocclusions and be able to accurately describe abnormal dental, skeletal and soft tissue relationships.
  - Be able to describe the fundamental architecture of bone tissue. Be able to describe the biological events involved in orthodontic tooth movement.
  - Gain an understanding of the process of craniofacial growth and development.
  - Be able to describe in detail the components of the soft tissue, skeletal and dental examination of the patient.
  - Understand the principles of cephalometric radiography. Be able to identify skeletal and soft tissue landmarks on a cephalometric radiograph.
  - Be able to analyze the data acquired from a cephalometric radiograph.
  - Be able to describe and complete the various types of mixed dentition and permanent dentition space analyses used in orthodontic diagnosis.
  - Be able to formulate an orthodontic diagnosis and problem list for a given patient.
  - Gain an understanding of the construction and use of fixed appliances and commonly used removable appliances.
  - Be able to identify commonly used orthodontic appliances and describe the basic mechanism of action for these appliances.
  - Gain an understanding of the basis of orthodontic biomechanics. The student should be able to resolve simple biomechanical force application problems.
  - Be able to describe the wire properties and characteristics of commonly used orthodontic wires. Be able to describe the load-deflection diagram used in explaining wire properties.
  - Recognize and differentiate occlusal problems in children and adults. Identify and explain orthodontic treatment protocols for Class I, II and III type malocclusions.
  - Complete a study model analysis and understand the use of the permanent and mixed dentition analyses in orthodontic treatment planning.
  - Complete a cephalometric analysis and understand the basis of cephalometric analysis in orthodontic treatment planning.
  - Gain experience in fixed orthodontic appliance placement and removal.
  - Gain experience in the construction and placement of a removable orthodontic appliance.

Grading: 50% mid exam, 50% final exam. Grading also includes a Pass/Fail Laboratory Examination.

**DDS 6181 Orthodontic Clinic Rotation**
S-N only, 0.2 credit(s);
Instructor: De Felippes, Nanci Lara

Description: The clinical course is a week-long rotation in Orthodontics designed to provide additional experience in the comprehensive evaluation and treatment of patients. This educational experience is intended to enhance the student's understanding of orthodontic treatment planning in combination with other disciplines in Dentistry.

- To enhance the student's judgment in the areas of diagnosis, treatment planning, and treatment objectives.
- To expose students to the use of contemporary orthodontic appliances.
- To enhance the student's understanding of the treatment of specific orthodontic problems.
- COURSE OBJECTIVES
  - Recognize and differentiate occlusal problems in children and adults.
  - Determine a patient's need for orthodontic treatment and the optimal time for orthodontic treatment.
  - Provide clinical experience in the treatment and management of orthodontic patients.

Grading: 100% other evaluation. Grading is based on a Pass/Fail Clinical Competency Examination.
**DDS 6213 Microbiology for Dental Students**

**A-F only, 4 credit(s);**

**Instructor:** Jardine, Paul James

**Description:** This course will present an important core of information essential for an understanding of many of the microbial diseases encountered by dental professionals. The course will include an overview of general microbiology, the molecular genetics of oral microbes, the pathogenesis of human microbial diseases, the immune system, and current utilization of diagnostic microbiology and various laboratory methods. Upon successful completion of this course the student will have met the expectations of the faculty as listed for each portion of the course. The student will be prepared, in part, to take the microbiology portion of the National Boards. Students will have a level of understanding of many microbial diseases allowing them to fulfill their future responsibilities to their patients and the health care community.

**Grading:** 100% other evaluation. Periodic quizzes, class exercises, and three exams will be given.

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**DDS 6214 General Histology**

**A-F only, 3.7 credit(s);**

**Instructor:** Bakdash, Bashar

**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 also covers general concepts of human embryologic development. The intent is for students to have a clear mental image of the human body at the microscopic level. 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.

**Grading:** 100% other evaluation. Grading is based on 4 examinations throughout the semester.

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**DDS 6234 Radiographic Interpretation**

**A-F only, 2 credit(s);**

**Instructor:** Ahmad, Mansur

**Description:** The purpose of this course is to assist students in learning a systematic evaluation of intraoral and extraoral radiographs emphasizing radiographic interpretation of developmental and acquired anomalies of teeth, osseous structures and maxillary sinuses; and manifestations of systemic diseases in jaws and associated structures. The course also assists the students to understand the biologic effects of radiation on cellular, tissue and organ levels. In addition, the course introduces advanced imaging modalities as used in dentistry.

**Grading:** 100% other evaluation. Periodic quizzes, class exercises, and three exams will be given.
DDS 6253 General & Systematic Pathology  
A-F only, 5 credit(s);  
Instructor: Krafts MD,Kristine Pauline  
Description: <html> <p>COURSE PURPOSE</p> <p>Pathology for Dental Students provides students with a basic understanding of the causes, mechanisms, and effects of human disease. The first part of the course covers general, foundational aspects of pathology, such as neoplasia, tissue injury and repair, and immunologic concepts. The second part of the course covers specific diseases according to organ systems, such as the cardiovascular system and respiratory system. After finishing this course, students will understand how diseases impact patients, and will be able to modify treatment and care accordingly. Students will also be able to recognize common oral manifestations of systemic diseases in order to provide more complete patient care.</p> </html>  
COURSE OBJECTIVES  
<i>Be able to recognize oral manifestations of systemic diseases such as leukemia and lupus. Many diseases have manifestations in the oral cavity; dentists may be able to identify such lesions early in the disease course, before the patient seeks medical care.</i>  
<i>Understand how common diseases, such as heart disease and emphysema, may impact the health of your patients. A knowledge of the medical implications of these diseases will help you safely manage your patients - and will deepen your understanding of your patients as a whole.</i>  
<i>Be familiar with the purpose and practical usage of commonly ordered laboratory tests (such as hemoglobin and liver function tests). This is important for general knowledge and for boards.</i>  
<i>Learn the basics of the language of pathology (e.g., how to name tumors, what does "dysplasia" mean). This will prepare you for oral pathology and for boards.</i>  
<i>Understand the etiology of common medical conditions (e.g., the risk factors for atherosclerosis). Your patients may listen to you more attentively than they do their physicians.</i>  
Grading: Grading is based on 8 quizzes and 4 exams given throughout the semester.

DDS 6271 TMD & Orofacial Pain  
A-F only, 0.8 credit(s);  
Instructor: Nixdorf,Donald R  
Description: <html> <p>COURSE PURPOSE</p> <p>The purpose of this course is to develop foundation knowledge of the discipline of public health and the role dental public health plays within the dental profession. Course content emphasizes an understanding of the current state of affairs surrounding dental public health as well as factors that impact communities and populations access to oral health care. The course will facilitate students’ preparation for community-based care and community service learning.</p> </html>  
COURSE OBJECTIVES  
<i>Delineate the scope of practice within the area of TMD & Orofacial Pain.</i>  
<i>Outline the components of a patient history needed to obtain a diagnosis of TMD.</i>  
<i>Outline the components of a physical exam needed to obtain a diagnosis of TMD.</i>  
<i>Know the general differential diagnosis for pain presenting in the orofacial region.</i>  
<i>Understand how to provide patients with TMD self-care.</i>  
<i>Understand how to provide medical management for patients with acute TMD pain.</i>  
<i>List the various treatment options available for TMD patient care.</i>  
<i>List the various types of pain that may present in the orofacial region.</i>  
<i>Understand the role of dentists in the diagnosis and treatment of TMD and Orofacial Pain patients.</i>  
Grading: 100% final exam.

DDS 6331 Dental Public Health I  
S-N only, 1.9 credit(s);  
Instructor: Self,Karl D  
Description: <html> <p>COURSE PURPOSE</p> <p>The purpose of this course is to develop foundation knowledge of the discipline of public health and the role dental public health plays within the dental profession. Course content emphasizes an understanding of the current state of affairs surrounding dental public health as well as factors that impact communities and populations access to oral health care. The course will facilitate students’ preparation for community-based care and community service learning.</p> </html>  
COURSE OBJECTIVES  
<i>Upon completion of this course, students will be able to describe the definition and development of dental public health.</i>  
<i>Upon completion of this course, students will be able to discuss the role of the various government agencies in dental public health care.</i>  
<i>Upon completion of this course, students will be able to identify components of the public health infrastructure in the United States.</i>  
<i>Upon completion of this course, students will be able to identify and document key demographic and socio-economic factors which underlie the demand for dental care in urban and rural communities.</i>  
<i>Upon completion of this course, students will be able to indicate points of similarity and difference when considering public health versus individual health.</i>  
<i>Upon completion of this course, students will be able to critically examine research literature from the field of community oral health.</i>  
<i>Upon completion of this course, students will be able to prepare and present oral and visual information demonstrating their mastery of objectives 1-4 above.</i>  
Grading: 30% mid exam, 30% final exam, 20% special projects, 10% quizzes, 10% other evaluation.

DDS 6337 Current Legal Issues for the New Dentist  
S-N only, 2.1 credit(s);  
Instructor: Ryan,Mary-Lynn L  
Description: <html> <p>COURSE PURPOSE</p> <p>The purpose of this course is to introduce fourth year dental students to legal issues that may arise during the first years of practice.</p> </html>  
COURSE OBJECTIVES  
<i>Explain and discuss the laws</i>  
Grading: Upon the successful completion of this course, the students will be able to:  
30% mid exam, 30% final exam, 20% special projects, 10% quizzes, 10% other evaluation.
DDS 6340 Medical Emergencies and Patient Safety in the Dental Clinical Environment
S-N only, 0.5 credit(s);
Instructor: Thierer DDS, Todd E
Description: <html> <p>COURSE PURPOSE</p> <p>This course is designed to provide students with both hands on and didactic training in recognizing and managing medical emergencies. It will also give an overview of patient safety and how to reduce the risk of accidental patient injury.</p> <p>COURSE OBJECTIVES</p> <p>Upon completion of the course, the student will be able to:</p> <ol> <li>Apply best practices in preventing medical emergencies in the dental office.</li> <li>Recognize and respond to the signs and symptoms of the most common medical emergencies that occur in a dental office.</li> <li>Communicate effectively in interactions with the emergency health care providers and patients.</li> <li>Demonstrate critical thinking behaviors in responding to emergency situations.</li> <li>Identify the supplies found in an emergency kit and understand the purpose of each.</li> <li>Recognize and understand the function of the equipment necessary to manage a medical emergency in a dental office.</li> <li>Perform training drills using the "team approach" to prepare members of the dental team for medical emergencies.</li> <li>Take, evaluate, and record the patient's vital signs and recognize the significance of the signs in relation to patient status.</li> <li>Describe the chain of command in a medical emergency.</li> <li>Identify and describe common drugs used in the management of medical emergencies.</li> <li>Recognize the extent of problems in patient safety in medical and dental care.</li> <li>Understand the harm caused by errors and system failures.</li> <li>Describe the role of various systems and factors in creating safety and in causing errors and adverse events.</li> <li>Identify factors that can contribute to enhanced patient safety.</li> <li>Identify the main sources of error and risk in the workplace.</li> </ol> Grading: 70% final exam, 30% other evaluation. Other Evaluation- Attendance at lectures, successful completion of any assignments.

DDS 6362 Outreach Experiences II
S-N only, 2 credit(s);
Instructor: Schulz DDS, Paul D
Description:

DDS 6411 Applied Dental Biomaterials
A-F only, 2 credit(s);
Instructor: Aparicio PhD, Conrado
Description: <html> <p>COURSE PURPOSE</p> <p>Almost every course of dental treatment involves the use of biomaterials. Use of the wrong material, or wrong usage of the correct material, can contribute significantly to failure of treatment. Thus the general course purpose is stated as: "the application of scientific principles to the selection and utilization of dental biomaterials."<br> <p>COURSE OBJECTIVES</p> <ol> <li>Understand the consequences of placement of a biomaterial in the oral environment in terms of biocompatibility and durability of the material.</li> <li>Define the mechanical, physical and chemical properties of materials (bulk and surface properties) that are of relevance to dental biomaterials.</li> <li>State the principles of material reinforcement, with specific reference to composite materials and composite structures.</li> <li>State the three mechanisms of adhesion, and their applicability to dental procedures.</li> <li>State the general composition, structure and properties of all materials used in the mouth and also all materials employed in the laboratory fabrication of restorations and prostheses.</li> <li>Understand the effect of mishandling of materials on properties, durability and efficacy.</li> <li>Systematically critique materials, noting their merits and limitations.</li> <li>Employ critical
skills in interpretation of the literature and utilize evidence-based principles in material selection. Additionally, each lecture has specific objectives related to the lecture topic.

**Grading:** 100% other evaluation. Graded based on 5 tests and 1 written exercise.

**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
- **Description:** Application of oral anatomy. Fixed prosthodontic lab techniques. Fundamentals of tooth preparation. Designed to assist in development of manual dexterity skills and knowledge of dental anatomy of the human dentition.

**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 based training that will better prepare them 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.
- **COURSE OBJECTIVES:** The student will demonstrate an understanding of how to use the advanced simulation equipment including the lessons and maintenance of the unit. This will be accomplished by reviewing the "Advanced Simulation Clinic Orientation" video on the course web site and pass the quiz at a minimum of 90%. The student will also prepare by reading "Operative Basics" on the course website. The student will demonstrate a satisfactory level of psychomotor skill development by performing the required cavity preparations at a passing level.

**DDS 6436 Operative Dentistry II**
- **A-F only, 2.1 credit(s);**
- **Instructor:** Phair, Craig B
- **Description:** The purpose of this course is to provide a foundation of knowledge that is necessary for restoring individual teeth exhibiting moderate to extensive destruction resulting from dental caries. The principles, rationale, technique for and indications, contraindications, advantages, and disadvantages of restoring these lesions with dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin will be presented.
- **COURSE OBJECTIVES:** The student will be able to list the principles and rationale for the preparation and restoration of moderate to large caries lesions when utilizing dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin. The student will be able to describe the technique for the preparation and restoration of moderate to large caries lesion when utilizing dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin. The student will be able to list advantages and disadvantages of dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin when restoring moderate to large caries lesions. The student will be able to list the indications and contraindications for restoring moderate to large caries lesions with dental amalgam, intra-coronal and partial veneer cast gold, porcelain, and composite resin.
- **Grading:** 35% mid exam, 45% final exam, 20% quizzes.

**DDS 6437 Operative Dentistry II Lab**
- **A-F only, 2.9 credit(s);**
- **Instructor:** Phair, Craig B
- **Description:** The purpose of this course is to provide exercises that simulate the preparation and restoration of individual teeth exhibiting moderate to extensive destruction resulting from dental caries. These simulation exercises will include the preparation of teeth utilizing dental amalgam, composite resin, intra-coronal and partial veneer cast gold, and porcelain as well as restorations utilizing amalgam and composite resin.
- **COURSE OBJECTIVES:** The student will be able to demonstrate the ability to perform clinically acceptable preparations, in a clinical simulation setting, for extensive amalgam, cast gold onlay, porcelain onlay, and anterior and posterior composite resin.
- **Grading:** 100% other evaluation. Grading- 25% Daily Projects, 75% Practical Exams.
DDS 6439 Operative Dentistry IV
A-F only, 1.4 credit(s);
Instructor: Zidan, Omar
Description: <html> <p>Students will be learning about current concepts in General Dentistry and Operative Dentistry applying evidence-based approaches. The main focus of the course will be on contemporary treatment modalities related to new paradigm shifts in general restorative dentistry. The faculty of Operative Dentistry and students will present their understanding on contemporary treatment modalities related to:<ul> <li>dental caries- the disease and its symptoms</li> <li>the non-invasive and minimally invasive treatment approach</li> <li>modern composites</li> <li>pain of dentin origin</li> <li>digital restorative dentistry using Cad/Cam smile analysis</li> <li>bleaching</li> <li>porcelain veneers</li> </ul>The presentations reflect the conceptual understanding of individual presenters and should provide foundation knowledge in those different areas. As you are in an academic setting, you can expect to be exposed to different or conflicting views. Differences in understanding and approaches should enrich your academic experience, it should motivate you to further research these areas of differences so you can adopt a rational point of view based on your understanding. In addition to the material presented in class, students are expected to learn how to answer clinical questions based on an evidence-based approach. Students will work in teams to formulate search strategies, run searches, read and evaluate scientific and unscientific literature pertaining to clinical questions. Students are expected to evaluate both the content and the quality of the knowledge related to the various aspect of each topic. Students working in teams are expected to articulate their understanding in a written paper and an oral presentation. The papers and the presentations are the collective work of each team, and should reflect the outcome of the team effort in researching and representing the state of knowledge of the assigned topic using an evidence-based approach. All the students should be able to work within teams and they are expected to fulfill their assigned role within each team. Each student should be able to present a part of the team findings as a part of the team presentation. Students are expected to show how to integrate the team findings in a clinical protocol and how to apply it to a clinical case. It is expected that the experience you gain from this course should be reflected on your daily clinical activities, decisions, and judgments.</p> </html>
Grading: 100% other evaluation. Grading- 50% Team work, 20% Team score, 15% daily quiz and interactions, 10% Postings, 5% Other.

DDS 6475 Preclinical Prosthodontics Techniques Lecture IV
A-F only, 1.8 credit(s);
Instructor: Cook, Gary Eugene
Description: <html> <p>COURSE PURPOSE</p> <p>The lecture course will review basic principles and philosophies of complete denture Prosthodontics. The presentations are intended to integrate human biology with the mechanical principles that govern the design and fabrication of a removable prosthesis for the fully edentulous patient.</p> <p>COURSE OBJECTIVES</p> <p>At the conclusion of the lecture course, the student will be able to identify the:</p> <ul> <li>Concepts and principles of complete denture Prosthodontics.</li> <li>Cognitive skills involved in creating simple treatment plans requiring complete denture therapy alone or in conjunction with other dental disciplines such as oral surgery.</li> <li>Ethical and professional values including knowledge of the circumstances that indicate referral to a prosthodontic specialist.</li> <li>Materials and manipulation techniques necessary for the fabrication of complete dentures.</li> <li>Design characteristics of complete denture fabrication in order to communicate and direct a laboratory technician.</li> <li>Principles and application of evidenced-based information pertaining to complete denture Prosthodontics.</li> </ul> <p>Grading: 100% other evaluation.</p> </html>

DDS 6476 Preclinical Prosthodontic Technique Laboratory IV, Complete Dentures
A-F only, 2.3 credit(s);
Instructor: Cook, Gary Eugene
Description: <html> <p>COURSE PURPOSE</p> <p>The laboratory course correlates with the lecture topics and consists of multiple related projects designed to illustrate proper fabrication and evaluation of complete dentures. Faculty in the Simulation Clinic will guide the various steps associated with the projects.</p> <p>COURSE OBJECTIVES</p> <p>At the conclusion of the laboratory course, the student will be able to identify and demonstrate the:</p> <ul> <li>Concepts and principles of complete denture Prosthodontics.</li> <li>Cognitive and psychomotor skills involved in creating simple treatment plans requiring complete denture therapy alone or in conjunction with other dental disciplines such as oral surgery.</li> <li>Ethical and professional values including knowledge of the circumstances that indicate referral to a prosthodontic specialist.</li> <li>Materials and manipulation techniques necessary for the fabrication of complete dentures.</li> <li>Design characteristics of complete denture fabrication in order to communicate and direct a laboratory technician.</li> <li>Principles and application of evidenced-based information pertaining to complete denture fabrication.</li> </ul> <p>Grading: 100% other evaluation.</p> </html>

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: Quick, Karin
Description: Student may contact the instructor or department for information.

**DDS 6601 Community Volunteer Experience Elective**
S-N only, 0 credit(s);
Instructor: Quick, Karin
Description: Student may contact the instructor or department for information.

**DDS 6602 Elective Regional Volunteer Experience**
S-N only, 0 credit(s), 4 completions allowed;
Instructor: Quick, Karin
Description: Student may contact the instructor or department for information.

**DDS 6603 Elective Regional Volunteer Experience**
S-N only, 0 credit(s);
Instructor: Quick, Karin
Description: Student may contact the instructor or department for information.

**DDS 6607 Interprofessional Leadership and Facilitation Elective**
S-N only, 1 credit(s);
Instructor: Jardine, Paul James
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: Quick, Karin
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: Quick, Karin
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: Quick, Karin
Description: Student may contact the instructor or department for information.

**DDS 6611 Elective Externship IV**
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Quick, Karin
Description: Student may contact the instructor or department for information.

**DDS 6612 Volunteer Outreach Opportunity**
S-N only, 0 credit(s), 3 completions allowed;
Instructor: Schulz DDS, Paul D
Description: Student may contact the instructor or department for information.

**DDS 6613 Endodontic Topics for the General Dentist**
S-N only, 0 credit(s);
Instructor: Harris, Samantha P
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: Quick, Karin
Description: Student may contact the instructor or department for information.

DDS 6617 Advanced Simulation Clinic Elective II
S-N only, 0.5 credit(s);
Instructor: Quick, Karin
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 6622 EBD: Advanced Dental Materials for Esthetic & Digital Applications
S-N only, 1 credit(s);
Instructor: Zidan, Omar
Description: Student may contact the instructor or department for information.

DDS 6631 DDS/PhD Research Elective I
S-N only, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: Herzberg, Mark C
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 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: Oosterhoff, Jenneke A
Description: Why study Dutch? While the US is debating gay marriage, legalization of drugs, prostitution, terminal care/euthanasia, pension and healthcare reform, the Dutch have forged creative and practical solutions which maximize the individual's rights and freedoms while adhering to ethical standards and the dignity of life. Learning Dutch is more than just learning a language, it is an opening of the mind to the creative, ethical and moral debates of our times. How is it that this small country has put such an enormous imprint in the arts, culture, commerce, human liberty, freedom and international law? Study Dutch and find out! Chinese gives you access to a bigger economy. Spanish is one of the widest used languages in the Americas. German, French & Italian are all classic languages of immigrants to the US. But the Dutch have been exploring the world and the human condition for centuries and their global culture and creativity are far out of proportion to their landmass and population. Did you know that the Netherlands is the third-largest foreign investor in the United States? What is so unique about Dutch? Dutch is intensive but very rewarding - you will be reading books by the end of your studies. And most importantly - you will gain insight into the worldly and creative Dutch spirit and open your
mind to new possibilities - strengthening your own curiosity and creativity. The Department of German, Scandinavian and Dutch welcomes you to Dutch 1001 this fall!

**Style:** 20% Lecture, 20% Discussion, 10% Laboratory, 40% Small Group Activities, 10% Web Based, interactive exercises (including lab)

**Grading:** 10% mid exam, 10% final exam, 40% quizzes, 10% written homework, 20% in-class presentation, 10% other evaluation. written homework

**Exam Format:** quizzes, tests

**Dtch 1003 Intermediate Dutch**

5 credit(s); 1002 Credit will not be granted if credit has been received for: DTCH 4003;

**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 Dtch 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

**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. We will focus on Dutch literary representations of the Second World War with special interest in children’s memories and experiences. Literature as well as art and film will be presented and analyzed. Students will learn about a particularly important period in the history of The Netherlands with lasting impact on today's culture. Students entering this class should know enough Dutch to read the texts in the original, to participate in class discussions, and to complete written assignments in form of study questions, take home exams, short essays, and journals. To increase their vocabulary, students will be exposed to a multitude of texts: literary texts, film, and lectures. To further their composition and conversation skills, selected grammatical topics and structures will be reviewed and practiced.

**Style:** 10% Lecture, 20% Film/Video, 40% Discussion, 20% Small Group Activities, pre-writing and interactive exercises

**Grading:** 30% reports/papers, 30% reflection paper, 10% in-class presentation, 30% class participation.

**Dtch 3310 Studies in Dutch Literature: Heroes and Anti-Heroes in the Second World War**

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. We will focus on Dutch literary representations of the Second World War with special interest in children’s memories and experiences. Literature as well as art and film will be presented and analyzed. Students will learn about a particularly important period in the history of The Netherlands with lasting impact on today's culture. Students entering this class should know enough Dutch to read the texts in the original, to participate in class discussions, and to complete written assignments in form of study questions, take home exams, short essays, and journals. To increase their vocabulary, students will be exposed to a multitude of texts: literary texts, film, and lectures. To further their composition and conversation skills, selected grammatical topics and structures will be reviewed and practiced.

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

**Grading:** 30% reports/papers, 30% reflection paper, 10% in-class presentation, 30% class participation.

**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: Oosterhoff,Jenneke A
Description: Why study Dutch? While the US is debating gay marriage, legalization of drugs, prostitution, terminal care/euthanasia, pension and healthcare reform, the Dutch have forged creative and practical solutions which maximize the individual's rights and freedoms while adhering to ethical standards and the dignity of life. Learning Dutch is more than just learning a language, it is an opening of the mind to the creative, ethical and moral debates of our times. How is it that this small country has put such an enormous imprint in the arts, culture, commerce, human liberty, freedom and international law? Study Dutch and find out! Chinese gives you access to a bigger economy. Spanish is one of the widest used languages in the Americas. German, French & Italian are all classic languages of immigrants to the US. But the Dutch have been exploring the world and the human condition for centuries and their global culture and creativity are far out of proportion to their landmass and population. Did you know that the Netherlands is the third-largest foreign investor in the United States? What is so unique about Dutch? Dutch is intensive but very rewarding - you will be reading books by the end of your studies. And most importantly - you will gain insight into the worldly and creative Dutch spirit and open your mind to new possibilities - strengthening your own curiosity and creativity. The Department of German, Scandinavian and Dutch welcomes you to Dutch 1001 this fall!
Style: 20% Lecture, 20% Discussion, 10% Laboratory, 40% Small Group Activities, 10% Web Based. interactive exercises (including lab)
Grading: 10% mid exam, 10% final exam, 40% quizzes, 10% written homework, 20% in-class presentation, 10% other evaluation. written homework
Exam Format: quizzes, tests

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,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 per class session. See the description for Dtch 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

Dtch 4011 Conversation and Composition
2 credit(s);Grad student
Credit will not be granted if credit has been received for: DTCH 3011W;
Instructor: Oosterhoff,Jenneke 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. We will focus on Dutch literary representations of the Second World War with special interest in children’s memories and experiences. Literature as well as art and film will be presented and analyzed. Students will learn about a particularly important period in the history of The Netherlands with lasting impact on today’s culture. Students entering this class should know enough Dutch to read the texts in the original, to participate in class discussions, and to complete written assignments in form of study questions, take home exams, short essays, and journals. To increase their vocabulary, students will be exposed to a multitude of texts: literary texts, film, and lectures. To further their composition and conversation skills, selected grammatical topics and structures will be reviewed and practiced.
Style: 10% Lecture, 20% Film/Video, 40% Discussion, 20% Small Group Activities, 10% Student Presentation.
Grading: 30% reports/papers, 30% quizzes, 20% class participation.

Dtch 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.
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: Gender in Medieval/Early Modern Culture
3 credit(s), max credits 6;
Instructor: Watkins, John
Description: Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Spanish and Spanish-American Baroque/Neo-Baroque
3 credit(s), max credits 6;
Instructor: Spadaccini, Nicholas
Description: Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Shakespeare and Marlowe
3 credit(s), max credits 6;
Instructor: Garner, Shirley Nelson
Description: We will read eight plays, four of Shakespeare, four of Marlowe, which I think of as treating similar themes. They will include the following: The Jew of Malta, The Merchant of Venice, Edward II, Richard II, Tamburlaine, Macbeth, Dr. Faustus, and King Lear. I will be interested in the historical, cultural, and literary contexts within which these plays were produced. I am especially interested in the ways race, class, and gender figure and don’t figure. I tend to read literature from a feminist and psychoanalytic perspective, and I give considerable attention to class, which in Marlowe is a prominent theme and in Shakespeare a more muted one. Students will write two-page papers on six of the plays, prepare a two-page summary of a collateral reading of their choosing, and write a 12 ? 15 page paper on a topic of your choosing and related to the course.

EMS 8500 Topics in Early Modern Studies: Music of J.S. Bach
3 credit(s), max credits 6;
Instructor: Harness, Kelley A
Description: Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: Science, Technology, and Religion
3 credit(s), max credits 6;
Instructor: Alexander, Jennifer Karns
Description: Many observers have been stunned by the rise of religious fundamentalisms in highly advanced cultures, because people often assume that advanced scientific and technological cultures are secular. This seminar asks whether this assumption is true, by asking how science, technology, and religion have interacted, empirically and historically. Scholars have focused on science and religion for generations, but very few have investigated technology and religion, and yet technology seems to be one thing that crosses cultural boundaries with ease. The seminar opens with an analysis of the concept of secularity, and then asks if we can identify secular societies in a time of globalization, by surveying interactions between science and technology and the great world religions. We read work by Charles Taylor on secular societies, George Saliba on Islam and European science and technology, Noah Efron on Judaism and science, and Donald Lopez on Buddhism, science, and epistemology. The literature is most developed on science and Christianity, and we read the debate between Richard Dawkins and David Bentley Hart on the role of Christianity in scientific development, recent reappraisals by a variety of scholars of perennial myths of warfare between Christianity and science (such as Galileo's dispute with the Catholic Church), and Peter Harrison on the role of theology in early scientific practices. We then turn to David F. Noble's study of Christianity and technology, and ask why scholars have paid so little attention to religion and technology. The seminar concentrates on the early modern and the late modern/industrial periods, and readings will be tailored to students' interests in the themes of the course.

Style: 80% Discussion, 20% Student Presentation. This seminar is devoted to discussions of readings. Students will take turns introducing the readings and leading discussion.
Grading: 50% reports/papers, 10% in-class presentation, 40% class participation.

EMS 8500 Topics in Early Modern Studies: Seminar in Early American History
3 credit(s), max credits 6;
Instructor: Fischer, Kirsten
Description: Student may contact the instructor or department for information.
EMS 8500 Topics in Early Modern Studies: Colonial Discourse in Spanish American Writing
3 credit(s), max credits 6;
Instructor: Marrero-Fente, Raul A
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: Kleinspehn, Karen L
Description: Instructor for one section of the course: Kleinspehn, Karen L -- This course focuses on Earth-Science issues and concepts that students encounter in their daily lives through the media, as voters, as homeowners or landowners or as global citizens. No attempt is made to transform students into science majors nor is previous experience in math or sciences expected. Instead, students develop useful insight into how the Earth works. Topics as diverse as volcanoes, earthquakes, tsunamis, climate change, petroleum resources, water resources, river floods, lakes, coastal engineering, mountain building, hurricanes, the Mississippi Delta, sea-level change, etc. are embedded in a background that emphasizes the interconnections and recycling among the atmosphere, hydrosphere and solid Earth. Overall, the course is a fun and fascinating look at the processes that shape our home planet. ESCI 1001 satisfies the Council on Liberal Education's requirements for both the Environmental Theme and a Physical Science with Lab. Textbook: Earth: Portrait of a Planet by Stephen Marshak, 2008 (NOTE 3RD EDITION ONLY!!) ISBN: 978-0-393-93036-8 (Note: PLEASE DIRECT ALL QUESTIONS REGARDING THE LAB to Kent Kirkby: kirkby@umn.edu)
Style: 40% Lecture, 10% Film/Video, 10% Discussion, 40% Laboratory.
Grading: 40% mid exam, 25% final exam, 35% laboratory evaluation. The two best scores of 3 mid-term exams are used to calculate mid-term exam grade, which constitutes 40% of the total grade
Exam Format: Mid-term exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc. The final exam is only multiple choice 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: Hirschmann, Marc M
Description: Student may contact the instructor or department for information.

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: ESCI 1001 provides an opportunity to rediscover our planet and explore our place within a remarkably dynamic and integrated world. A world in which mammoths still stalked Arctic islands while pyramids were being built and one in which geologic processes continue to subtly or dramatically affect the course of human history. In turn, within a remarkably short time we ourselves have become one of the planet's most powerful geologic forces as we struggle to balance our need for Earth resources with the environmental legacy of their use. The course's goal is to provide some of the background understanding necessary to become a better informed citizen in a world where many of the most pressing issues facing our society are tied directly or indirectly to earth resources, earth environments, and earth processes. From forces capable of shifting continents, driving volcanic eruptions or powerful earthquakes, through dinosaurs and their world, to the ongoing evolution of our present environments, ESCI 1001 also offers a chance to view the Earth from a different perspective. To not only explore the science behind our understanding of our planet, but to rediscover a sense of awe about the world we live in. This course does not require a math or science background, only a curiosity about our world. ESCI 1001 satisfies the Liberal Education requirements for a Physical Science course and the Environmental Theme.
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: 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:** Matsumoto, Katsumi

**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. Humans also derive great benefits from the oceans in terms of food, recreation, and ecological services. 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 and how it relates to us. We start with 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. 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 also examine how biological production and decomposition of organic matter control nutrient distributions and support higher trophic levels. 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: the El Ni?o 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 consider questions of marine policy, (over)fishing, and marine mineral resources from the perspectives of human impacts and ethics.

**Style:** 45% Lecture, 5% Film/Video, 5% Discussion, 40% Laboratory, 5% Guest Speakers.

**Grading:** 25% final exam, 42% quizzes, 33% laboratory evaluation.

**Exam Format:** Multiple choice

**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 outrace 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:** Kleinspehn, Karen L

**Description:** Instructor for one section of the course: Kleinspehn, Karen L -- This course focuses on Earth-Science issues and concepts that students encounter in their daily lives through the media, as voters, as homeowners or landowners or as global citizens. No attempt is made to transform students into science majors nor is previous experience in math or sciences expected. Instead, students develop useful insight into how the Earth works. Topics as diverse as volcanoes, earthquakes, tsunamis, climate change, petroleum resources, water resources, river floods, lakes, coastal engineering, mountain building, hurricanes, the Mississippi Delta, sea-level change, etc. are embedded in a background that emphasizes the interconnections and recycling among the atmosphere, hydrosphere and solid Earth. Overall, the course is a fun and fascinating look at the processes that shape our home planet. ESCI 1001 satisfies the Council on Liberal Education's requirements for both the Environmental Theme and a Physical Science with Lab. Textbook: Earth: Portrait of a Planet by Stephen Marshak, 2008 (NOTE 3RD EDITION ONLY!!) ISBN: 978-0-393-93036-8 (Note: PLEASE DIRECT ALL QUESTIONS REGARDING THE LAB to Kent Kirkby: kirkby@umn.edu)

**Style:** 80% Lecture, 10% Film/Video, 10% Discussion.

**Grading:** 60% mid exam, 40% final exam. The two best scores of 3 mid-term exams are used to calculate mid-term exam grade, which constitutes 40% of the total grade

**Exam Format:** Mid-term exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc. The final exam is only multiple choice 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:** Hirschmann, Marc M

**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:** Kirkby, Kent Charles

**Description:** ESCI 1101 is offered in two different modes of instruction. The on-site classroom mode is simply a lecture-only version of ESCI 1001 and you can refer to my section of ESCI 1001 for a course description. There is also a Non-Term Based Distance Learning version of the class offered through Online and Distance Learning (ODL), College of Continuing Education. The syllabus for that course should be attached to this description. Both versions of ESCI 1101 satisfy Liberal Education requirements for the Environment Theme.

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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, 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.

**Style:** 100% Lecture.

**Grading:** Mid-term exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc. The final exam is only multiple choice questions.
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: Matsumoto, Katsumi
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. Humans also derive great benefits from the oceans in terms of food, recreation, and ecological services. 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 and how it relates to us. We start with 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. 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 also examine how biological production and decomposition of organic matter control nutrient distributions and support higher trophic levels. 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: 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 consider questions of marine policy, (over)fishing, and marine mineral resources from the perspectives of human impacts and ethics.
Style: 70% Lecture, 10% Film/Video, 10% Discussion, 10% Guest Speakers.
Grading: 34% final exam, 66% quizzes.

ESci 1901 Freshman Seminar: Environment
A-F only, 3 credit(s), max credits 6; Meets CLE req of Environment
Instructor: Whitney, Donna L
Description: Student may contact the instructor or department for information.

ESci 1901 Freshman Seminar: Environment
A-F only, 3 credit(s), max credits 6; Meets CLE req of Environment
Instructor: Teyssier, Christian
Description: Student may contact the instructor or department for information.

ESci 1901 Freshman Seminar: Environment
A-F only, 3 credit(s), max credits 6; Meets CLE req of Environment
Instructor: Thorleifson, Harvey
Description: Understanding interactions between the Minnesota environment, natural resources, ecosystems, and human activity requires a grasp of the structure and history of our landscape, from the Mississippi River basin to the Red River Valley and the Lake Superior basin. Underlying and shaping this landscape are ancient rocks in the north and in the deep subsurface, younger limestone and sandstone in the south, and the deposits of the Ice Age that our soils have formed in. These deposits host our principal drinking water sources, so we must understand them in order to protect and wisely use our water. Reading assignments will be papers, brochures, and web content. A full-day field trip planned for Saturday, September 29 will examine the water resources of our rivers and lakes, and a second full-day trip on Saturday, October 6 will examine how geology controls our well water supply. Those unable to attend a field trip may instead prepare a paper.
Style: 40% Lecture, 30% Small Group Activities, 30% Field Trips.
Grading: 20% reports/papers, 20% special projects, 60% written homework.

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.
ESci 3005 Earth Resources
3 credit(s);
Instructor: Alexander, Scott C
Description: ESCI 3005 examines the geological constraints on material resources, the size and global distribution of energy and material resources, and the international and ethical implications of the use of those resources. Students will be introduced to quantitative estimates of the size and life times of known resources. ESCI 3005 will focus on the international nature of resource production and trade and on the political and economic implications of that international interdependence. ESCI 3005 will also explore the political and ethical questions involved with the growing internationalization of resource production and usage. ESCI 3005 is designed for students without an extensive background in science or mathematics and is one part of a 3000 level environmental minor program in Earth Sciences.
Style: 66% Lecture, 4% Film/Video, 30% Discussion.
Grading: 25% mid exam, 30% final exam, 25% written homework, 20% class participation.

ESci 3005 Earth Resources
3 credit(s);
Instructor: Ito, Emi
Description: ESCI 3005 examines the geological constraints on material resources, the size and global distribution of energy and material resources, and the international and ethical implications of the use of those resources. Students will be introduced to quantitative estimates of the size and life times of known resources. ESCI 3005 will focus on the international nature of resource production and trade and on the political and economic implications of that international interdependence. ESCI 3005 will also explore the political and ethical questions involved with the growing internationalization of resource production and usage. ESCI 3005 is designed for students without an extensive background in science or mathematics and is one part of a 3000 level environmental minor program in Earth Sciences.
Style: 66% Lecture, 4% Film/Video, 30% Discussion.
Grading: 25% mid exam, 30% final exam, 25% written homework, 20% class participation.

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 refferal to appropriate faculty members. Students will work on a one-to-one basis with a faculty member. Projects may include literature review, labortatory 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.
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 Pollution: 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.

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 techniques 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 or 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: Revenaugh,Justin
Description: Student may contact the instructor or department for information.
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 4703 Glacial Geology  
4 credit(s);  
Instructor: Jennings, Carrie Ellen  
Description: The course will cover Quaternary climate history; the various geologic records used to reconstruct the history of glaciation; formation and dynamics of glaciers and ice sheets; processes of glacial erosion and deposition; and the nature of glacial sediments and landforms. From this course we hope that you will gain a better understanding of the glacial sediments and landforms of Minnesota and the Upper midwest, an appreciation for the world-wide causes and effects of glaciation, and a better perspective of today’s climate in relation to earth's climate history.  

ESci 5353 Electron Microprobe Theory and Practice  
3 credit(s); [One yr chem, one yr physics] or instr consent Credit will not be granted if credit has been received for: MATS 5353;  
Instructor: von der Handt, Anette  
Description: Student may contact the instructor or department for information.  

ESci 5353 Electron Microprobe Theory and Practice  
3 credit(s); [One yr chem, one yr physics] or instr consent Credit will not be granted if credit has been received for: MATS 5353;  
Instructor: von der Handt, Anette  
Description: Student may contact the instructor or department for information.  

ESci 5601 Advanced Sedimentology  
4 credit(s);  
Instructor: Kleinspehn, Karen L  
Description: This course explores sedimentary basins and their processes from the sub-microscopic to basin scale with a focus on the petrology of clastic and carbonate deposits, tectonic and paleoclimatic records, paleocurrent and provenance analysis, thermal histories, diagenetic effects on subsurface fluid flow, and volcanic sedimentation. An additional goal is to interpret and predict deposits including alluvial fans, marine/lacustine fan deltas, aeolian settings and tidal systems. Remaining lecture topics are open and will be based on the interests of the class registrants and might include glacial settings, fluvial systems, coasts, storms, tsunamis, turbidite fans, carbonate platforms, continental shelves, deep-sea trenches and/or abyssal plains. Lectures are supported by images of outcrops or modern deposits from multiple parts of the world. No textbook is assigned, but vigorous class discussion is based on in-class exercises and reading assignments from the current geoscience literature. Students write reviews of recently published journal articles and a 10-12 page paper and present their paper topic in an informal in-class poster session. This course is for graduate students and upper-level undergraduates who have completed Geo 4602, Sedimentology and Stratigraphy, or an equivalent course.  
Style: 60% Lecture, 40% Discussion.  
Grading: 40% reports/papers, 10% class participation, 40% other evaluation. Review of published papers  
Exam Format: No exams  

ESci 8001 Introductory Graduate Seminar  
S-N only, 2 credit(s);  
Instructor: Hirschmann, Marc M  
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 ESCRI 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.

ESci 8980 Seminar: Current Topics in Earth Sciences  
S-N only, 1 credit(s), max credits 30, 30 completions allowed; 
Instructor: Feinberg, Joshua M.  
Description: Student may contact the instructor or department for information.

ESci 8994 Research in Earth Sciences  
1-4 credit(s), max credits 30, 30 completions allowed; 
Instructor: Moskowitz, Bruce Matthew  
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); Meets CLE req of Technology and Society  
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 4111 Ultrasound Physics I
A-F only, 2 credit(s);
Instructor: Finstuen, Joshua Allen
Description: Student may contact the instructor or department for information.

Echo 4211 Congenital Heart Disease
A-F only, 3 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: Eilts, Alex
Description: Welcome to EEB 3001. This course introduces key concepts in the science of ecology and places them in the context of questions we face as a society. The course has been developed for students who need to use ecological knowledge rather than those who plan to do ecological research. During the semester we will build an understanding of how physical, biological and evolutionary processes interact, from the level of individuals to populations, communities, ecosystems, landscapes and the Earth system as a whole. We will strive to apply this knowledge to understand the role of ecology in our everyday lives. This course is designed for upper-division, non-majors and it has no prerequisites other than Introductory Biology. Biological Sciences students may not apply credit for this course toward their major, and credit will not be granted if credit has been received for BIOL 3407, BIOL 3807 or BIOL 5407.

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, 10% Discussion, 30% Laboratory.
Grading: 30% mid exam, 25% final exam, 15% reports/papers, 30% laboratory evaluation.
Exam Format: short answer, fill-in-the-blank, and essay

EEB 4330W Animal Communication
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ward, Jessica Lyn
Description: This course will provide a broad introduction to the scientific study of animal communication. Animal communication is one of the most interdisciplinary topics in all of biology. Understanding how and why humans and other animals communicate with each other requires some basic understanding of behavior, cell biology, genetics, development, ecology, endocrinology, evolution, learning theory, neurophysiology, and even physics and economics! This course will draw on material from each of these disciplines to elucidate (i) the mechanisms underlying how animals produce and perceive communication signals, (ii) how signals propagate through and are transformed by the environment, (iii) whether and how signals can convey information, and (iv) how signalers, their signals, and receivers are adapted for communication through evolution by natural and sexual selection in various behavioral contexts. The course emphasizes a broad, comparative approach with the goal of giving students a deeper understanding of the mechanisms, function,
This course will provide a broad introduction to the scientific study of animal communication. Animal communication is one of the most interdisciplinary topics in all of biology. Understanding how and why humans and other animals communicate with each other requires some basic understanding of behavior, cell biology, genetics, development, ecology, endocrinology, evolution, learning theory, neurophysiology, and even physics and economics! This course will draw on material from each of these disciplines to elucidate (i) the mechanisms underlying how animals produce and perceive communication signals, (ii) how signals propagate through and are transformed by the environment, (iii) whether and how signals can convey information, and (iv) how signalers, their signals, and receivers are adapted for communication through evolution by natural and sexual selection in various behavioral contexts. The course emphasizes a broad, comparative approach with the goal of giving students a deeper understanding of the mechanisms, function, development, and evolution of the communication behaviors exhibited by a wide diversity of animals. Through active participation in this course, students should? ? gain a broader and deeper understanding of the diversity of animal communication systems as well as the causal mechanisms, development, evolution and function of these systems. ? learn basic facts and theories about animal communication and be able to place these into a conceptual framework based on broader biological principles. ? gain an appreciation for the diversity of approaches to studying animal communication, from investigations of neural mechanisms to the analyses of broad scale geographic patterns. ? acquire the knowledge and skills required to successfully investigate animal communication using the scientific method. ? learn to analyze and interpret published work, gauging the efficacy of evidence, and to think critically about ideas in order to assess the merits of different views and develop the ability to effectively communicate with others to facilitate the productive exchange of ideas. ? gain the knowledge and background required to attend a professional meeting or pick up a professional journal and follow, understand, and even critique professional talks and published papers on the topic of animal communication.

**Style:** 45% Lecture, 38% Discussion, 17% Student Presentation.

**Grading:** 66% reports/papers, 17% journal, 17% in-class presentation.
EEB 4609W Ecosystem Ecology
3 credit(s); Meets CLE req of Environment; meets CLE req of Writing Intensive
Instructor: Kazanski, Clare E
Description: Regulation of energy and elements cycling through ecosystems; dependence of the cycles on kinds and numbers of species within ecosystems; effects of human-induced global changes on the functioning of ecosystems. The course is roughly divided into halves. The first half will provide some background on the history of ecosystem ecology and on climate and soils, but will focus primarily on element cycling, particularly carbon and nutrient cycles. We will examine the energy base of ecosystems, what controls carbon fixation by plants and what is the fate of that fixed carbon. We will also study nutrient inputs to, cycling through, and losses from ecosystems. The second half will focus on interactions and perturbations, including those resulting from human-induced global changes. We will examine transfers of energy from primary producers to higher trophic levels and how herbivory and disturbances such as fire affect primary production and nutrient cycling. We will examine how elevated CO2, changing climate, increased atmospheric nitrogen deposition, biological invasions, and losses of biodiversity alter ecosystem processes. We will also discuss human dependence on ecosystems.
Style: 66% Lecture, 33% Discussion.
Grading: 35% mid exam, 40% final exam, 20% reports/papers, 5% class participation.
Exam Format: short-answer and essay

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: 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: Hobbie, Sarah E
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: Simons, Andrew M.
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: Finlay, Jacques C
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: Harris, Andrew C
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 5053 Ecology: Theory and Concepts
4 credit(s);
Instructor: Tilman, David
Description: Classical and modern mathematical theories of population growth, interspecific interactions, and ecosystem dynamics and functioning are developed, with emphasis both on underlying simplifying assumptions and on the effects of added biolgical reality on the robustness of the predictions of the theories. These theories are applied to both terrestrial and aquatic ecosystems. The course develops general mathematical principles of population regulation and stability, of competition and interspecific coexistence, of predator-prey interactions, of the dynamics of human diseases, of the maintenace of biodiversity, and of how feedbacks and material constraints influence ecosystem structure and functioning. The mathematics used includes algebra, analytical geometry, and calculus, with important mathematical concepts introduced and reviewed as needed, but with all students needing at a year of college calculus as background.
Style: 70% Lecture, 30% Discussion.
Grading: 50% mid exam, 25% final exam, 15% reports/papers, 10% special projects.
Exam Format: Essay, numerical problems

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: Finlay, Jacques C
Description: Welcome to Limnology, the study of freshwater ecosystems. One of the most exciting and challenging aspects of limnological study is that it relies on synthesis of physical, chemical, and biological disciplines for both basic and applied understanding of freshwaters. Limnology is the primary disciplinary example of the mechanistic examination of feedbacks between organisms and their environment, and serves as a model for the study of other ecosystems. Like many limnology courses, the focus is primarily on lakes, and to lesser extent rivers, but we will consider other habitats too, just in less detail. This is a course intended for graduate students and advanced undergraduates. Its goal is to provide an in depth characterization of fundamental features of lake ecosystems, with emphasis on interaction of biological processes, and physio-chemical conditions in freshwaters. The course also considers the complex ways that humans influence lakes. Students will be expected to access and interpret diverse reading material ranging from textbooks to primary literature, and will access widely available limnological data for problem sets during the semester.
Style: 70% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation.

EEB 5609 Ecosystem Ecology
3 credit(s);
Instructor: Hobbie, Sarah E
Description: Student may contact the instructor or department for information.

EEB 5609 Ecosystem Ecology
3 credit(s);
Instructor: Hobbie, Sarah E
Description: Regulation of energy and elements cycling through ecosystems; dependence of the cycles on kinds and numbers of species within ecosystems; effects of human-induced global changes on the functioning of ecosystems. The course is roughly divided into halves. The first half will provide some background on the history of ecosystem ecology and on climate and soils, but will focus primarily on element cycling, particularly carbon and nutrient cycles. We will examine the energy base of ecosystems; what controls carbon fixation by plants and what is the fate of that fixed carbon. We will also study nutrient inputs to, cycling through, and losses from ecosystems. The second half will focus on interactions and perturbations, including those resulting from human-induced global changes. We will examine transfers of energy from primary producers to higher trophic levels and how herbivory and disturbances such as fire affect primary production and nutrient cycling. We will examine transfers of energy from primary producers to higher trophic levels and how herbivory and disturbances such as fire affect primary production and nutrient cycling. We will examine how elevated CO2, changing climate, increased atmospheric nitrogen deposition, biological invasions, and losses of biodiversity alter ecosystem processes. We will also discuss human dependence on ecosystems.
Style: 66% Lecture, 33% Discussion.
Grading: 35% mid exam, 40% final exam, 20% reports/papers, 5% class participation.
Exam Format: short-answer and essay

EEB 5609 Ecosystem Ecology
3 credit(s);
Instructor: Kazanski, Clare E
Description: Regulation of energy and elements cycling through ecosystems; dependence of the cycles on kinds and numbers of species within ecosystems; effects of human-induced global changes on the functioning of ecosystems. The course is roughly divided into halves. The first half will provide some background on the history of ecosystem ecology and on climate and soils, but will focus primarily on element cycling, particularly carbon and nutrient cycles. We will examine the energy base of ecosystems; what controls carbon fixation by plants and what is the fate of that fixed carbon. We will also study nutrient inputs to, cycling through, and losses from ecosystems. The second half will focus on interactions and perturbations, including those resulting from human-induced global changes. We will examine transfers of energy from primary producers to higher trophic levels and how herbivory and disturbances such as fire affect primary production and nutrient cycling. We will examine transfers of energy from primary producers to higher trophic levels and how herbivory and disturbances such as fire affect primary production and nutrient cycling. We will examine how elevated CO2, changing climate, increased atmospheric nitrogen deposition, biological invasions, and losses of biodiversity alter ecosystem processes. We will also discuss human dependence on ecosystems.
Style: 66% Lecture, 33% Discussion.
Grading: 35% mid exam, 40% final exam, 20% reports/papers, 5% class participation.
Exam Format: short-answer and essay

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: Sterling, Robert Warner  
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: Barker, Fredrick K  
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: Clark, Adam T  
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 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: Amin, Minesh Devendra
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 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: Online
Grading: See attached syllabus

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
Grading: See attached syllabus

Econ 1905 Freshman Seminar: Strategic Thinking and Social Interaction
A-F only, 3 credit(s);
Instructor: Sher, Itai
Description: Student may contact the instructor or department for information.

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

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
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 receive the syllabus via email.
Style: No formal meeting time. Please contact the instructor via email.
Grading: 100% reports/papers.

Econ 3960 Topics in Economics
3 credit(s), max credits 6;
Instructor: STAFF
Description: FALL 2012: The Chinese Economy
Style: 90% Lecture, 10% Discussion.
Exam Format: Essay and short problems

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.

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.

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

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. BA econ majors are welcome to take it as well. Students must have successfully completed all prerequisites PRIOR to taking this course. The course includes regression analysis, estimation procedures, computer applications; and teaches you how to work with data. THE PREREQUISITES HAVE BEEN CHANGED WITH EFFECT FROM FALL 2013: NEW PREREQS ARE: ECON 3101 OR EQUIV; STAT 3011-3022 OR EQUIV.
Style: 75% Lecture, 25% 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 equiv], completion of freshman writing practiceCredit 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 4738 Advanced Macroeconomic Policy
A-F only, 4 credit(s);

Instructor: Dyrda, Sebastian

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

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
Econ 4960H Advanced Topics in Economics Honors
A-F only, 4 credit(s), max credits 8;
Instructor: Richter, Marcel K
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
Econ 8185 Advanced Topics in Macroeconomics
2 credit(s), max credits 4;
Instructor: Rios-Rull, Victor
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 8211 Econometrics
2 credit(s);
Instructor: Kim, Kyoo-il
Description: Student may contact the instructor or department for information.

Econ 8212 Econometrics
2 credit(s);
Instructor: Kim, Kyoo-il
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 8581 Advanced Topics in Labor Economics
2 credit(s), max credits 4;
Instructor: Rios-Rull, Victor
Description: Student may contact the instructor or department for information.

Econ 8581 Advanced Topics in Labor Economics
2 credit(s), max credits 4;
Instructor: Guvenen, Fatih
Description: Student may contact the instructor or department for information.

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 110 Wulling Hall

EdHD 1620 Current Topics: Strategies for Student Success: Teamwork: Surviving to Thriving
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Bonebright, DeAnne
Description: This course will provide students with practical strategies to help them thrive as team members and encourage productive group development. Specific attention will be paid to the student’s strengths in relation to teamwork. The traditional tasks and behaviors explored during the various stages of Tuckman’s Group Development Model will give students the foresight to prepare a strategy for success. Focus will be on academic group work, but career group work will also be considered. Students will have the opportunity to practice working in teams and will participate in a group project. Assignments and course activities will allow students to identify the roles they can play in a group, become familiar with resources and strategies that will support successful teamwork, and apply their understanding to future success.

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: Goff, Emily Lee  
Description: Welcome to Writing a Research Proposal from ?A? to ?IRB?! This is course is focused entirely on giving you the tools and support that you need to write a research proposal for a wide variety of audiences. Maybe you are interested in pursuing a directed study with an esteemed professor or would like to be awarded an Undergraduate Research Opportunities Program (UROP) award. No matter what kind of research you are interested in pursuing, you will complete this course with a research proposal in hand! I hope that you will learn a bit about epistemology and methods along the way and discover the researcher within you. Upon the completion of this course, it is expected that students will: 1. Identify, define, and solve problems related to their own interests and academic research (SLO) 2. Locate and critically evaluate information to inform their research proposal (SLO) 3. Articulate research interests 4. Identify a relevant research question 5. Understand and model the elements of a research proposal.

EdHD 1620 Current Topics: Strategies for Student Success: Teamwork: Surviving to Thriving  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Mein, Jen L  
Description: This course will provide students with practical strategies to help them thrive as team members and encourage productive group development. Specific attention will be paid to the student?s strengths in relation to teamwork. The traditional tasks and behaviors explored during the various stages of Tuckman?s Group Development Model will give students the foresight to prepare a strategy for success. Focus will be on academic group work, but career group work will also be considered. Students will have the opportunity to practice working in teams and will participate in a group project. Assignments and course activities will allow students to identify the roles they can play in a group, become familiar with resources and strategies that will support successful teaming, and apply their understanding to future success.

EdHD 1620 Current Topics: Strategies for Student Success: Effective Interviewing  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Wolfe, Sarah C  
Description: This course will prepare students for the entire interview process?beginning with writing a tailored resume through salary negotiation. Students will learn to thoughtfully articulate their strengths and experiences and eloquently respond to interview questions in a way that will *Wow* future employers. They will also be well prepared to tailor their resume and cover letter to a specific position. Upon the completion of the course, students will not only have a resume in hand, but also have the confidence to talk about themselves in a meaningful way, the understanding of the entire interview process, strategies for commonly asked questions, and a huge list of online and written resources that will be invaluable as they begin to interview like a pro.

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. Your personal brand is authentic and relevant, it is what makes you unique and helps you stand out from the crowd?It is distinctly you. 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: Preparing for Meaningful Community Engagement  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Cameron, Amber Jo Swiggum  
Description: The impact engagement experiences can have for students and the impact engagement experiences can have for community partners is limitless. This course is designed to serve as a catalyst for a life of active citizenship and social responsibility. It will offer you an opportunity to identify your assets and motivations for community work and prepare you for mutually meaningful, positive work that has a lasting impact. Class work will prepare you to artfully explore ambiguity, reduce awkwardness, clarify roles, develop etiquette and communication skills, and prepare for experiences that have a lasting impact.

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: Are you preparing for the job or internship hunt? Are you mystified by asking professors to write a reference letter for you? Are you desperate to learn more about a career path or industry, but are uncomfortable with the idea of interviewing someone who is currently in the industry? Are you trying to find the right way to succinctly articulate your
strengths and professional skills? Do you want to learn more about professional networking? Perfect. You are in the right place! Tactfully initiating and managing your professional network can quickly and efficiently open doors and expose you to opportunities that might otherwise be unattainable or unknown. Additionally, the largest majority of job opportunities are found through a professional network. You really cannot afford to neglect it! 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: Building your Professional Network
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Maples, Alyssa
Description: Are you preparing for the job or internship hunt? Are you mystified by asking professors to write a reference letter for you? Are you desperate to learn more about a career path or industry, but are uncomfortable with the idea of interviewing someone who is currently in the industry? Are you trying to find the right way to succinctly articulate your strengths and professional skills? Do you want to learn more about professional networking? Perfect. You are in the right place! Tactfully initiating and managing your professional network can quickly and efficiently open doors and expose you to opportunities that might otherwise be unattainable or unknown. Additionally, the largest majority of job opportunities are found through a professional network. You really cannot afford to neglect it! 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: Graduate School: Exploring, Preparing, Applying
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: Graduate School: Exploring, Preparing, Applying
1 credit(s), max credits 6, 6 completions allowed;
Instructor: Keeney, Brianne E
Description: This course will help you learn more about graduate programs and study opportunities, general admission requirements, resources, funding and the financial impacts of a graduate degree, and the important steps you can take as an undergraduate student to be prepared for the formal application process.

EdHD 1701 Introduction to TRiO: Identity, Culture, and College Success
A-F only, 1 credit(s);
Instructor: Sawyer MA, Greg S.
Description: Student may contact the instructor or department for information.

EdHD 1701 Introduction to TRiO: Identity, Culture, and College Success
A-F only, 1 credit(s);
Instructor: Whittaker, Nathan Laurence
Description: Student may contact the instructor or department for information.

EdHD 1701 Introduction to TRiO: Identity, Culture, and College Success
A-F only, 1 credit(s);
Instructor: Collins, Kirsten Jean
Description: Student may contact the instructor or department for information.

EdHD 1920 CEHD Special Topics
1 credit(s), max credits 6;
Instructor: Boehm, Eva Lynn
Description: Student may contact the instructor or department for information.
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 3001 Exploring the Teaching Profession I  
A-F only, 2 credit(s);  
Instructor: Pyscher,Tracey Michelle  
Description: Student may contact the instructor or department for information.

EdHD 5000 Cultures, Schools, and Communities (Human Relations)  
A-F only, 1 credit(s);Enrolled in teacher initial licensure programCredit will not be granted if credit has been received for: EDHD 5020;  
Instructor: Goh PhD,Michael P.  
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 recommendedCredit will not be granted if credit has been received for: EPSY 3119;  
Instructor: Jorczak,Robert L  
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: Kelley, Mary Beth  
Description: Student may contact the instructor or department for information.

EdHD 5005 School and Society  
A-F only, 2 credit(s);  
Instructor: Tanner, Samuel Jaye  
Description: Student may contact the instructor or department for information.

EdHD 5005 School and Society  
A-F only, 2 credit(s);  
Instructor: Schuelka, Matthew John  
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: Mc Fadden MA, Justin R  
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: Laufenberg, Diana April  
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: McGill, Chuck  
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: Lefebvre,Elisabeth  
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: Kaiper,Anna Katherine  
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 5013 Child and Adolescent Development for Teaching and Learning  
S-N only, 1 credit(s);  
Instructor: LoBello,Jana  
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: Dembouski PhD,Lisa  
Description: EdHD 5015 and EdHD 5016 provide an overview of the areas of exceptionality defined in federal and state regulations. The focus of 5015 will be historical perspectives, definitions, etiology, characteristics, needs, and service delivery systems for each area of exceptionality as well as the general educators? role in collaborating with special education personnel in order to best serve students with special needs. EdHD 5016 will emphasize learners with exceptionalities, parents and families, IEPs and the IEP process, and resources related to differentiating instruction for students with special needs (including Response to Intervention, Universal Design for Learning, and other practical classroom strategies). This course has two modules of instruction. The first module (5015) will be during the summer term and the second module (5016) will occur during the fall. Teacher candidates will attend class sessions on campus, contribute to course assignments online via Google Drive, and implement course content during their general education practicum experiences. All course assignments are designed to provide Teacher Candidates with the knowledge, resources, and tools needed to serve exceptional students in general education classrooms.

EdHD 5200 Special Topics: Professional Development for Educators: Access & Equity U.S. Higher Education  
1 credit(s), max credits 12, 4 completions allowed;  
Instructor: Winters,Kelly T  
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development  
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;  
Instructor: Peterson,Debra Stevens  
Description: Student may contact the instructor or department for information.
EdHD 5300 Special Topics in Education and Human Development
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Peterson, Debra Stevens
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Peterson, Debra Stevens
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Peterson, Debra Stevens
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development
Coursework
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Anderson, Karen L
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development
Coursework
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Anderson, Karen L
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development
Coursework
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Anderson, Karen L
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development
Coursework
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Watson PhD, Christopher L
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development
Coursework
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Watson PhD, Christopher L
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development
Coursework
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Watson PhD, Christopher L
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Roehrig, Gillian Heather  
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Center for Early Education Development  
Coursework  
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;  
Instructor: Ottman, Deborah  
Description: Student may contact the instructor or department for information.

Educational Psychology  250 Education Science Building

3 credit(s), max credits 6;  
Instructor: Bart, William M  
Description: Student may contact the instructor or department for information.

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: Jorczak, Robert L  
Description: Student may contact the instructor or department for information.

EPsy 3132 Psychology of Multiculturalism in Education  
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US  
Instructor: Hansen-Burke, Annie  
Description: The PSYCHOLOGY OF MULTICULTURALISM IN EDUCATION examines contemporary and historical perspectives on issues of social and cultural diversity in the United States, with special emphasis on issues of race, ethnicity, gender, social class, age, disability, sexual orientation, and religious diversity. Processes of oppression, stereotyping, prejudice and social perception biases and their relationships to education are the primary topics of the course. This course will consist of discussion, lecture, film, and structured exercise components. In addition, students will complete reflective writing exercises to apply course concepts to real-world experiences. Grading is based on class participation (20%), reflective writing assignments (20%), a cooperative group project (20%), and two exams (20% each). Students will have the opportunity for small group and whole class discussion throughout the course.  
Style: 40% Lecture, 10% Film/Video, 25% Discussion, 25% Small Group Activities.
Grading: 20% mid exam, 20% final exam, 20% special projects, 20% reflection paper, 20% in-class presentation.

Exam Format: Exams are a combination of multiple choice and short-answer. The final exam includes a cooperative component as well as an individual component. Study guides are provided.

EPsy 3133 Practicum: Service Learning, Psychology of Multiculturalism in Education
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: delMas, Robert Claude
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

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: Zieffler PhD, Andrew S
Description: Student may contact the instructor or department for information.

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 Requirement 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.

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 4613 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 4613 Foundations of Special Education I
A-F only, 3 credit(s);
Instructor: Pierce, Becca L.
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: Varma, Keisha
Description: This course has two main goals: (1) to provide a broad, introductory overview of educational psychology and (2) to allow you to explore some topics of interest to you in depth. Educational Psychology has informed a range of practices and concerns within education. In recent decades, the field has also embraced methods of inquiry beyond the traditional paradigms of experimental psychology. This course will be taught using diverse methods. Traditional reading of
the text and lecture/discussion will be used, however, this will be done in a student-centered fashion so that both the
students and the instructor are engaged in a dialogue and a process of discovery about "truths" in the application of
psychology to teaching and learning. As you participate in this course you will be encouraged to reflect on your own
thoughts about how people learn, the intervening factors that influence learning, and best practices for supporting teaching
and learning. Students will use technology to apply psychological theories, to explore issues in education, and to reflect on
new ideas. Our class lectures and discussions will focus on psychological theories of learning and cognition, cognitive and
social development across the lifespan, motivation, individual differences, testing, assessment, teaching methodologies,
and pragmatic issues in educational settings.

Style: 40% Lecture, 20% Discussion, 15% Small Group Activities, 20% Student Presentation, 5% Guest Speakers.
Exam Format: This course has only a take-home final exam. The final exam will consist of a set of comprehensive essay
questions, requiring you to relate and incorporate material from covered during the semester.

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 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: Kendeou, Panayiota A.
Description: Student may contact the instructor or department for information.

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: delMas, Robert Claude
Description: Student may contact the instructor or department for information.

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: Fry, Elizabeth Brondos  
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: Ohrtman, Marguerite  
Description: Student may contact the instructor or department for information.

**EPsy 5401 Counseling Procedures**  
3 credit(s);  
Instructor: Turner, Sherri L  
Description: This course is designed as an introduction to the theory and practice of counseling. It is intended for non-majors who may use counseling skills in a professional capacity or for those who may be considering a career in counseling. In this course you will become acquainted with counseling theory, learn basic counseling skills, gain understanding of cross-cultural and multicultural counseling, and learn strategies for working with crisis victims. Instructional methods will include lecture, group interaction, and practice. This course will be web enhanced but the URL is...
not yet available.

**Style:** 25% Lecture, 65% Discussion, 10% Small Group Activities. Small group work

**Grading:** 65% reports/papers, 20% special projects, 15% class participation.

**EPsy 5436 Crisis Management and Consulting in Schools**

A-F only, 3 credit(s);
Instructor: Ohrtman, Marguerite
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 PhD, Christopher L
Description: Student may contact the instructor or department for information.

**EPsy 5611 Research-based Practices in Academic and Behavior Disabilities**

A-F only, 3 credit(s);
Instructor: Seifert PhD, Kathy
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 5616 Classroom Management and Behavior Analytic Problem Solving**

3 credit(s);
Instructor: Bjorkman, Jessica
Description: Student may contact the instructor or department for information.

**EPsy 5616 Classroom Management and Behavior Analytic Problem Solving**

3 credit(s);
Instructor: Matthews, Christine Jeanette
Description: Student may contact the instructor or department for information.

**EPsy 5619 Specialized Interventions in Mathematics for Students with Mild to Moderate Disabilities**

A-F only, 3 credit(s);
Instructor: Lein, Amy E
Description: Student may contact the instructor or department for information.

**EPsy 5624 Biomedical and Physical Impairments of Students with 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 anomalies 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 transferring 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 5631 Module 1: Introduction to Augmentative and Alternative Communication
A-F only, 1 credit(s); Credit will not be granted if credit has been received for: EPSY 5632;
Instructor: Hyppa Martin, Jolene K
Description: Student may contact the instructor or department for information.

EPsy 5636 Sensory Impairments of Students With Developmental Disabilities
2 credit(s);
Instructor: Paulson, Anna Regas
Description: Student may contact the instructor or department for information.

EPsy 5641 Foundations of Education for Individuals Who Are Deaf/Hard of Hearing
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
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 5651 Evident-Based Practices in Deaf Education
A-F only, 2 credit(s);
Instructor: Paulson, Anna Regas
Description: Student may contact the instructor or department for information.

EPsy 5656 Advanced Issues in Emotional Behavior Disorders
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: Bazyk, Julianne D
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 5705 Practicum in ECSE/Elementary Settings
S-N only, 1 credit(s);
Instructor: Paulson, Anna Regas
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: Student may contact the instructor or department for information.

EPsy 5754 Student Teaching: Social and Emotional Disabilities
A-F only, 1-6 credit(s), max credits 8, 8 completions allowed;
Instructor: Zeyer, Virginia Kay
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: Student may contact the instructor or department for information.

EPsy 5756 Student Teaching: Developmental Disabilities, Moderate/Severe
A-F only, 1-6 credit(s), max credits 6;
Instructor: Peper, Christine R
Description: Student may contact the instructor or department for information.

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: Miller, Donna Lynn
Description: Student may contact the instructor or department for information.

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: Miller, Donna Lynn
Description: Student may contact the instructor or department for information.

EPsy 5991 Independent Study in Educational Psychology
A-F only, 1-8 credit(s), max credits 20, 20 completions allowed; instr consent Credit will not be granted if credit has been received for: EPSY 5690;
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.
Instructor: Varma, Sashank
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, Keisha
Description: Student may contact the instructor or department for information.

EPsy 8215 Advanced Research Methodologies in Education
3 credit(s);
Instructor: Davison, Mark L
Description: Student may contact the instructor or department for information.

EPsy 8220 Special Topics: Seminar in Quantitative Methods: Analyzing Large-Scale Data
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Davenport Jr, Ernest C
Description: Student may contact the instructor or department for information.

EPsy 8220 Special Topics: Seminar in Quantitative Methods: Methods for Categorical Data in Education Research
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Zieffler PhD, Andrew S
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: delMas, Robert Claude
Description: This is the first course of the Ph.D. level statistics sequence in Educational Psychology. Students are introduced to basic methods of data description and statistical analysis. The course is applied, meaning the emphasis is on conceptual understanding of the methods used in data analysis rather than on the mathematical bases of the methods. It is assumed that the student has a working knowledge of high school-level algebra. Topics covered: descriptive statistics, normal distribution, sampling distributions, one- and two-sample hypothesis tests, confidence intervals, one-way analysis of variance, a priori and post hoc tests, simple linear regression, contingency table analysis, and testing assumptions for all statistical models.
Style: 60% Lecture, 40% Demonstration.
Grading: 25% written homework, 75% additional semester exams. The 8 lab assignments allow the student to practice and receive feedback. Together, the labs constitute 25% of the final grade. 75% of the student's final grade is based on the three course exams.
Exam Format: All 3 exams are take-home. Each exam involves the application of statistical concepts and procedures to analyze a data set. Each exam is posted at least one week before the due date.

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 8402 Individual Counseling: Theory and Applications
A-F only, 3 credit(s);
Instructor: Ruiz, Nicholas Jon
Description: Student may contact the instructor or department for information.

EPsy 8405 Career Development: Theory, Skills, and Counseling Applications
A-F only, 3 credit(s);
Instructor: Hanson, Matthew R
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 8452 Psychological Aspects of Counseling Supervision
3 credit(s);
Instructor: VandenLangenberg, Erin Renae
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: Ohrtman, Marguerite
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: Burke, Caroline Anne
Description: Student may contact the instructor or department for information.

EPsy 8509 Supervision Practicum: CSPP
1-2 credit(s), max credits 6, 6 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 6, 6 completions allowed;
Instructor: Burke, Caroline Anne
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: Math Assess&Interv Research for Sts with Math Diff
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Jitendra,Asha
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: McMaster,Kristen L.
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 8707 Principles of Behavior Analysis and Learning
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 credit(s), max credits 9, 9 completions allowed;
Instructor: Sullivan,Amanda Louise
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: Parker,David C
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: Burns,Matthew K
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-Burke, 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 1 Refresher Course for Electrical Engineers
A-F only, 0 credit(s);
Instructor: Nordell, Daniel Edwin
Description: This course is a review of electrical engineering fundamentals required to pass the National Council of Engineering Examiners Principles and Practice Examination in the discipline of Electrical Engineering. It is designed to aid the electrical engineer in preparation for the PE examination by presenting an organized review of material ordinarily contained in a college electrical engineering curriculum. Primary emphasis will be on problem solving with orientation as close as possible to the type of questions contained in the exam. Prerequisites: Completion of the Fundamentals of Engineering exam Electrical Engineering or equivalent degree 4 years electrical engineering experience
Style: 75% Lecture, 25% Discussion.
Grading: 100% successful completion of the FE exam

EE 1 Refresher Course for Electrical Engineers
A-F only, 0 credit(s);
Instructor: Ernst, Thomas W
Description: This course is a review of electrical engineering fundamentals required to pass the National Council of Engineering Examiners Principles and Practice Examination in the discipline of Electrical Engineering. It is designed to aid the electrical engineer in preparation for the PE examination by presenting an organized review of material ordinarily contained in a college electrical engineering curriculum. Primary emphasis will be on problem solving with orientation as close as possible to the type of questions contained in the exam. Prerequisites: Completion of the Fundamentals of Engineering exam Electrical Engineering or equivalent degree 4 years electrical engineering experience
Style: 75% Lecture, 25% Discussion.
Grading: 100% successful completion of the FE exam

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: Robbins, William P
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
EE 2011 Linear Systems, Circuits, and Electronics
3 credit(s);
Instructor: Ruden, P Paul
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: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
4 credit(s);
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
4 credit(s);
Instructor: Posbergh, Thomas Alfred
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: Kaleem, Faisal
Description: Student may contact the instructor or department for information.

EE 3015 Signals and Systems
3 credit(s);
Instructor: Leger, James Robert
Description: Student may contact the instructor or department for information.

EE 3025 Statistical Methods in Electrical and Computer Engineering
3 credit(s);
Instructor: Luo, Zhi-Quan
Description: Student may contact the instructor or department for information.

EE 3041 Industrial Assignment I
A-F only, 2 credit(s);
Instructor: Evan, Barbara Kettler
Description: Student may contact the instructor or department for information.

EE 3101 Circuits and Electronics Laboratory I
2 credit(s);
Instructor: Kaleem, Faisal
Description: Student may contact the instructor or department for information.

EE 3102 Circuits and Electronics Laboratory II
2 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 3115 Analog Electronics
3 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 3161 Semiconductor Devices
3 credit(s);
Instructor: Koester, Steven J
Description: Student may contact the instructor or department for information.

EE 3601 Transmission Lines, Fields, and Waves
3 credit(s);
Instructor: Gopinath, Anand
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); [3015, [upper div CSE or grad student in CSE major]] or instr consent Credit will not be granted if credit has been received for: AEM 4321;
Instructor: Georgiou, Tryphon T
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
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 4389W Introduction to Predictive Learning
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Cherkassky, Vladimir S
Description: EE 4398W SPRING 2008 INTRODUCTION to EMPIRICAL INFERENCE and SOFT COMPUTING Instructor Vladimir Cherkassky EE/CSci 6-111; 612-625-9597; cherkass@ece.umn.edu Office Hours: Tue Thu 11:15-12 and Thu 3-4 pm. Lecture time and place Tue Thu, 9:45 to 11:00 am, AmundH 156. Prerequisites EE 3025 for ECE students, or Stat 3022 for non-ECE majors. Working knowledge of concepts in probability theory (i.e., random variable, distribution, mean and st. deviation). Familiarity with computer programming using computer system of your choice for homework assignments. MATLAB or similar environment is recommended (for ECE students) but not required. Course Material: Lecture notes + book chapters + selected papers (will be posted on the web page? see ECE department homepage.) Course Description: Advances in computer and database technology motivate the need for methods for estimating dependencies (models) from the historical data. Often the common goal (of modeling) is to estimate a model providing good generalization, i.e. good prediction performance for future data. Such methods have been developed in various fields such as statistics, machine learning, neural networks, data mining etc. These diverse methodologies comprise an emerging field known as Empirical Inference or Predictive Learning, introduced in this course. The course covers three inter-related parts: 1. Technical Part deals with fundamental concepts and principles important for learning (generalization) from data. These issues are addressed by the mathematical theory known as Statistical Learning Theory (aka VC-theory), introduced in this course. 2. Practical Part focuses on constructive learning methods and applications. Representative learning methods include several statistical learning methods developed in machine learning, statistics and neural networks. These methods include Decision Trees, MultiLayer Perceptrons, Self-Organizing Maps, Support Vector Machines and Boosting. Various learning methods are illustrated via practical data mining applications, such as object recognition, financial engineering, genomics, signal denoising, text retrieval etc. 3. Philosophical Part explores the connection between mathematical principles established in Part 1, and the Philosophy of Science, which is concerned with general conditions for judging the validity (truthfulness) of inductive scientific theories. Similarly, the fundamental principles of inference from data (developed in Part 1) underlying practical data mining algorithms (in Part 2) will be also related to mechanisms of human learning and intelligence. Grading: 6 Homework assignments 50% 3 writing assignments 30% Midterm exam 20% There will be no final exam. All tests are open-book, open-notes.

EE 4501 Communications Systems
3 credit(s);
Instructor: Mahmoodi PhD, Abolghassem B
Description: Student may contact the instructor or department for information.

EE 4505 Communications Systems Laboratory
1 credit(s);
Instructor: Ravindran, Niranjay
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: Dhople, Sairaj
Description: Student may contact the instructor or department for information.

EE 4722 Power System Analysis Laboratory
1 credit(s);
Instructor: Dhople, Sairaj
Description: Student may contact the instructor or department for information.
EE 4741 Power Electronics
3 credit(s);
Instructor: Imbertson, Paul Jay
Description: Student may contact the instructor or department for information.

EE 4743 Switch-Mode Power Electronics Laboratory
1 credit(s);
Instructor: Imbertson, Paul Jay
Description: Student may contact the instructor or department for information.

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 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: Cho, Jeong-Hyun
Description: Student may contact the instructor or department for information.

EE 5173 Basic Microelectronics Laboratory
1 credit(s);
Instructor: Cho, Jeong-Hyun
Description: Student may contact the instructor or department for information.

EE 5181 Introduction to Nanotechnology
4 credit(s);
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 5181 Introduction to Nanotechnology
4 credit(s);
Instructor: Jacobs, Heinrich Otto Heiko
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 5251 Optimal Filtering and Estimation
3 credit(s); [[MATH 2243, STAT 3021] or equiv], CSE grad student] or dept consent ; 3025, 4231
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: Kim,Chris H.
Description: Student may contact the instructor or department for information.

EE 5333 Analog Integrated Circuit Design
3 credit(s);
Instructor: Harjani,Ramesh
Description: Fundamental circuits for analog signal processing. Design issues associated with MOS/BJT devices. Design/testing of circuits. Selected topics (e.g., modeling of basic IC components, design of operational amplifier or comparator or analog sampled-data circuit.

EE 5364 Advanced Computer Architecture
3 credit(s);[4363 or CSci 4203, CSE grad student] or dept consent credit will not be granted if credit received for: 8365, CSci 8203Credit will not be granted if credit has been received for: CSCI 5204;
Instructor: Zhai,Antonia Bingheng
Description: Student may contact the instructor or department for information.

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 5561 Image Processing and Applications
3 credit(s);
Instructor: Ebbini,Emad S
Description: Student may contact the instructor or department for information.

EE 5583 Error Control Coding
3 credit(s);
Instructor: Mazumdar,Arya
Description: Error-correcting code is a basic building block of any reliable communication system. We study geometric properties of codes to set fundamental limits of communication. Explicit algebraic and combinatorial constructions of codes are provided. Some of the practical and useful codes that will be covered include Hamming, BCH, Reed-Solomon, Reed-Muller and LDPC families of codes. This course also explores further applications to networking, testing, security, signal processing and storage.

EE 5602 RF/Microwave Circuit Design
3 credit(s);
Instructor: Franklin,Rhonda R.
Description: Student may contact the instructor or department for information.
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 media, 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, magneto-optics, 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: Wind Energy Essentials
2 credit(s), max credits 12, 3 completions allowed;
Instructor: Torrey, Ethan R
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: Torrey, Ethan R
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
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: 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
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: 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.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Cohen, Philip I
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: 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,Bethan 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
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: Mohan,Ned
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: 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
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
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: Sobelman, Gerald Edward
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: Leger, James Robert
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: 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
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: Victora, Randall 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: 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: Sidiropoulos, Nikolaos
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
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: 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: 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: 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: talkachova, alena
  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 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 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
  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
  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: rennolet, charles leon
  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: ottesen, hal
  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: zhang, zhi-li
  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: Gopinath, Anand
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: Tewfik, Ahmed Hossam
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: Sapiro, Guillermo R
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: Sapatnekar, Sachin Suresh
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: Moon, Jaekyun
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: Wollenberg, Bruce F
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: Posbergh, Thomas Alfred
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: Parhi, Keshab K.
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: Harjani, Ramesh
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: Cohen, Philip I
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: Ruden, P Paul
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: Georgiou, Tryphon T
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: Stadler, Bethanie J. Hills
  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: Higman, Ted King
  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: Kaveh, Mostafa
  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: Lilja, David J
  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: Mohan, Ned
  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: Talghader, Joseph John
  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: Cherkassky, Vladimir S
  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: Holte, James Edward
  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: Campbell, Stephen A
  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: Hubel, Allison
  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: Kinney, Larry L
  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: Kieffer, John C
  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: Robbins, William P
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: Sobelman, Gerald Edward
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: Leger, James Robert
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: Ebbini, Emad S
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: 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: Giannakis, Georgios B
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: Bazargan, Kia
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: Roychowdhury, Jaijeet
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: Jacobs, Heinrich Otto Heiko
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: Roumeliotis, Stergios
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: Wang, Jianping
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: Luo, Zhi-Quan
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: He, Bin
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: Jindal, Nihar
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: 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.

EE 8940 Special Investigations
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: Materials & Designs for Future Nonvolatile Memory
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 8950 Advanced Topics in Electrical and Computer Engineering: Nano-Optics
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Oh, Sang-Hyun
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Imbertson, Paul Jay
EE 8965 Plan C Project I
3 credit(s);
Instructor: Ernie,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.

EE 8965 Plan C Project I
3 credit(s);
Instructor: Wollenberg,Bruce F
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
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.

EE 8965 Plan C Project I
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
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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
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Instructor: Amin, Massoud
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
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Instructor: Luo, Zhi-Quan
Description: Student may contact the instructor or department for information.

EE 8965 Plan C Project I
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Instructor: He, Bin
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EE 8965 Plan C Project I
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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
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Instructor: Rennolet, Charles Leon
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EE 8967 Plan C Project II
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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
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Instructor: Wollenberg, Bruce F
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EE 8967 Plan C Project II
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Instructor: Posbergh, Thomas Alfred
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Instructor: Parhi, Keshab K.
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EE 8967 Plan C Project II
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Instructor: Georgiou, Tryphon T
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EE 8967 Plan C Project II
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Instructor: Stadler, Bethanie J. Hills
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EE 8967 Plan C Project II
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Instructor: Victoria, Randall H
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Instructor: Luo,Zhi-Quan
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Instructor: He,Bin
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Instructor: Jindal,Nihar
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EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Kim,Chris H.
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EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Jovanovic,Mihailo
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: Riedel,Marc
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: Oh,Sang-Hyun
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: Yoon,Euisik
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;
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 Clinical Seminar I  
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: Bowles, Walter Ray  
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: STAFF
- **Description:** This course helps students develop skills and strategies for reading and writing in English. Students read a variety of short and simplified texts and learn the fundamentals of writing at the sentence and basic paragraph level. Vocabulary development is also a focus. This course is intended for students with some prior English and is not for true beginners.

**ESL 30 Beginning Oral Skills**
- S-N only, 0 credit(s), 4 completions allowed;
- Instructor: STAFF
- **Description:** This course is designed for beginning level non-native speakers of English who have had some prior English instruction. The goal of this course is to help students develop skills and strategies for speaking and comprehending spoken English in both general and academic contexts. Students listen to a variety of short simplified texts and develop their spoken fluency and accuracy in conversations and discussions.

**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 high-beginning intensive reading and writing course for non-native speakers of English, students will improve reading skills for identifying the topic, main idea and details of adapted texts. Students will also choose books 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 ideas and organization as well as accurate grammar and vocabulary.
- **Exam Format:** Short answer

**ESL 130 High Beginning Oral Skills**
- S-N only, 0 credit(s), 3 completions allowed;
- Instructor: STAFF
- **Description:** This course is designed for non-native speakers of English with two years of prior English study. The goal of this course is to help students develop their oral communication skills for general and academic purposes. Students listen to short adapted texts and practice identifying main ideas and details, making inferences, taking notes, and synthesizing what they have heard. Students will engage in short conversations, class discussions and presentations. They will improve spoken fluency as well as accuracy in pronunciation, spoken grammar and vocabulary use.

**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 intermediate course is to help non-native speakers of English improve reading and writing skills in English. In class, students will read and discuss a variety of texts to practice reading strategies, 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:** This course helps intermediate non-native speakers of English improve listening and speaking skills for general and academic purposes. Students listen to both adapted and authentic texts to develop academic listening and speaking skills. Students identify main ideas and details, make inferences, take notes, and synthesize what they have heard. Students will improve spoken fluency and accuracy in formal and informal academic speaking contexts, including conversations, small group and class discussion, and presentations. This course will help students improve pronunciation, spoken grammar, and vocabulary use.  
**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:** STAFF  
**Description:** This course helps 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 320 Advanced Reading and Composition**  
**S-N only, 0 credit(s), 4 completions allowed;**  
**Instructor:** STAFF  
**Description:** ESL 320 is an advanced 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 apply a process approach to writing, and will progress from developing paragraphs to developing academic essays using effective patterns of organization.

**ESL 330 Advanced Oral Skills**  
**S-N only, 0 credit(s), 4 completions allowed;**  
**Instructor:** STAFF  
**Description:** This course helps advanced non-native speakers of English develop listening and speaking skills for participating in American academic lectures, discussions, presentations, and informal interaction. Students will listen to authentic texts and academic lectures, develop note-taking skills, synthesize and respond to content. This course will help students develop both their fluency and accuracy through work on pronunciation, spoken grammar, and academic vocabulary.

**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 adverbs; 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 420 is a high-advanced 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. By planning and developing three multi-draft papers, students begin to practice using persuasive and expository modes of writing to
accomplish specific purposes as writers. 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: This course helps high-advanced non-native speakers of English further improve skills for participating in American academic lectures, discussions, presentations, and informal interaction. Students will listen to authentic texts with a focus on academic lectures, develop note-taking skills, synthesize and respond to content. This course will help students further develop both their fluency and accuracy through work on pronunciation, spoken grammar, and academic vocabulary.

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: STAFF
Description: This course is open to students enrolled in the Intensive English Program (IEP) at level 3 and above. This course will help non-native English speaking students polish their English skills in order to be successful in university level classes. Topics will cover the English language needed to interact within university settings. Some topics of focus are academic life, student/instructor roles, communicating by email, classroom interactions, and discussion/panel presentation skills.

ESL 903 Business English
S-N only, 0 credit(s), 10 completions allowed;
Instructor: STAFF
Description: This course is designed for non-native speakers of English who have high-intermediate to advanced English skills and want to polish these skills for further career advancement. The course covers topics such as writing for business communication, speaking in meetings, large group presentations, and telephone communication. One of the goals of this course is to equip participants with techniques to aid in continual improvement of English skills beyond the class.

ESL 904 TOEFL Preparation
S-N only, 0 credit(s);
Instructor: STAFF
Description: This course is designed for non-native speakers of English who have high-intermediate to advanced English skills and who want to learn important test-taking skills in preparation for taking the internet-based Test of English as a Foreign Language (TOEFL iBT). This course offers intensive review of the four skills assessed on this exam: reading, written expression, listening, and speaking. In addition, students will review the grammatical structures of English, explore common question types, and advance test-taking strategies. While this course focuses on the TOEFL (iBT), the test-taking skills and language review covered in this course would also be useful for students preparing to take the paper-based TOEFL, IELTS, or MELAB proficiency assessments.

ESL 906 English for Business Interactions
S-N only, 0 credit(s);
Instructor: Peters,Bethany Denise
Description: Student may contact the instructor or department for information.

ESL 921 Academic Writing
S-N only, 0 credit(s), 3 completions allowed;
Instructor: STAFF
Description: This course meets with 3302. Designed for students who are non-native speakers of English, this course focuses on foundational writing skills and emphasizes the writing process - developing ideas, drafting, revising, and editing. Guided textual analyses of readings are used to develop writing skills through the close examination of strategies employed by accomplished writers. Through ongoing, active participation, students learn to (1) match writing to audience and purpose, (2) produce different genres of academic writing, (3) incorporate source material into writing, and (4) critique
their writing and that of others. Gains in basic writing skills culminate in students? ability to transfer acquired skills into
discipline-specific writing. Through development of personal voice and an appreciation for the importance of the credibility
of the writer, students also learn to recognize and avoid plagiarism. Problems with sentence structure, lexical grammar, and
diction are addressed individually.

ESL 931 Academic Speaking
S-N only, 0 credit(s), 3 completions allowed;
Instructor: STAFF
Description: This course meets with ESL 3602. 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,
students learn to present themselves professionally and socially in academic settings with accuracy, variety, and flexibility.
They will learn to organize and outline academic presentations, present information clearly and effectively, explain concepts
and processes from their academic field, involve audience members and respond to questions, and monitor and improve
their spoken fluency, grammar, and pronunciation.
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: STAFF
Description: This course meets with ESL 3402. This course enables students to develop the methods of citation,
conventions of style and organization, and critical reading and 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 and will learn about writing
resources on campus such as Peer Research Consultants and Student Writing Support. Problems with structure and
vocabulary usage are addressed individually.
Grading: 60% reports/papers, 20% written homework, 10% journal, 10% in-class presentation.

ESL 951 Pronunciation
S-N only, 0 credit(s);
Instructor: STAFF
Description: This course meets with 3551. This course is designed for advanced non-native English speaking students
who want to polish their pronunciation skills in English. Course content and activities center around improving the
production and perception of the sounds of the English language: individual sounds, rhythm, intonation, word and sentence
stress, and linking phenomena in fast speech.

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 3006 English for Business Interactions
2 credit(s), max credits 4;
Instructor: Peters,Bethany Denise
Description: Student may contact the instructor or department for information.

ESL 3101 Advanced English Grammar
4 credit(s), max credits 8;
Instructor: STAFF
Description: This course for academic credit is designed for students who are concurrently 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
Grading: See attached syllabus

ESL 3201 Advanced English Reading and Composition
5 credit(s), max credits 10;
Instructor: STAFF
Description: This course for academic credit is designed for students who are concurrently enrolled in degree programs at the University of Minnesota to work intensively on reading and writing skills. 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 course for academic credit is designed for students who are concurrently enrolled in degree programs at the University of Minnesota. This course 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 plan and develop three multi-draft papers to practice applying persuasive and expository modes of writing to accomplish specific purposes as writers. Students will also develop informal writing skills.

ESL 3302 Writing for Academic Purposes
4 credit(s), max credits 8;
Instructor: STAFF
Description: Designed for students who are non-native speakers of English and are concurrently enrolled in degree programs at the University of Minnesota, this course focuses on foundational writing skills and emphasizes the writing process - developing ideas, drafting, revising, and editing. Guided textual analyses of readings are used to develop writing skills through the close examination of strategies employed by accomplished writers. Through ongoing, active participation, students learn to (1) match writing to audience and purpose, (2) produce different genres of academic writing, (3) incorporate source material into writing, and (4) critique their writing and that of others. Gains in basic writing skills culminate in students' ability to transfer acquired skills into discipline-specific writing. Through development of personal voice and an appreciation for the importance of the credibility of the writer, students also learn to recognize and avoid plagiarism. Problems with sentence structure, lexical grammar, and diction are addressed individually.

ESL 3402 Research Writing for the American University
4 credit(s), max credits 8;
Instructor: STAFF
Description: This course for academic credit is designed for non-native speakers of English who are concurrently enrolled
in degree programs at the University of Minnesota. This course enables students to develop the methods of citation, conventions of style and organization, and critical reading and 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 and will learn about writing resources on campus such as Peer Research Consultants and Student Writing Support. Problems with structure and vocabulary usage are addressed individually.

**Grading:** 60% reports/papers, 20% written homework, 10% journal, 10% in-class presentation.

**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 or other coursework at the University of Minnesota to further improve skills for participating in American academic lectures, discussions, presentations, and informal interaction. Students will listen to authentic texts, including academic lectures, develop note-taking skills, synthesize and respond to content. This course will help students further develop both their fluency and accuracy through work on pronunciation, spoken grammar, and academic vocabulary.

**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, students learn to present themselves professionally and socially in academic settings with accuracy, variety, and flexibility. They will learn to organize and outline academic presentations, present information clearly and effectively, explain concepts and processes from their academic field, involve audience members and respond to questions, and monitor and improve their spoken fluency, grammar, and pronunciation.

**ESL 5006 English for Business Interactions**
- **2 credit(s), max credits 4;**
- **Instructor:** Peters,Bethany Denise
- **Description:** Student may contact the instructor or department for information.

**English: Literature**

**EngL 1001W Introduction to Literature: Poetry, Drama, Narrative**
- **4 credit(s); credit will not be granted if credit already received for: ENGL 1001,1002Credit 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:** Why do we read literature? What do we mean when we say we love a story, character, or happening in a book? How do written words on a page or screen captivate our attention and evoke our emotions? Comparing readings with shared themes across different literary styles and genres, we will explore how narrative, poetry, and drama each communicate differently. We will discuss how narration (the telling of stories) represents events in time and gives them meaning. In studying poetry, we will concentrate on often overlooked aspects of language: how sound, rhythm, and form work together to heighten words’ impact. By reading plays written for performance, we will consider both the richness of written scripts and their openness to collaborative transformation in live productions and films. Along with these basic properties of literary genre, we will learn to identify more nuanced aspects of literary form including tone, figurative language, characterization, setting, plotting, and thematic development. Readings will include both contemporary popular literature and canonically recognized texts, giving us the opportunity to enjoy young adult fiction, creative non-fiction, graphic novels, myths, song lyrics, and fairy tales as well as the work of traditionally recognized literary greats.
Assignments will include short tests, informal writing assignments that will help prepare you to craft formal essays, formal essays, and one revised essay. Classroom activities will include interactive lecture, small group discussions, brainstorming, reading and writing exercises, and consideration of supplemental audio-visual materials.

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. 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" (3.1.58-61), 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: Cihlar, James Jay
Description: In Introduction to Multicultural Literatures of the United States we will read prose and poetry by American writers of color, ranging from Nobel and Pulitzer prizewinning masters to debut authors. Our books will include THE BRIEF WONDROUS LIFE OF OSCAR WAO by Junot Diaz, THE NAMESAKE by Jhumpa Lahiri, YELLOW FACE by David Henry Hwang, LIFE ON MARS by Tracy K. Smith, and more. As we examine the specific meanings and methods of each work, we will also identify such elements as theme, motif, genre, structure, form, perspective, tone, voice, imagery, and metaphor. ENGL 1301W is a writing intensive class, which means that we will write drafts and revise before turning in final copies of our two formal papers, each five pages long. This four credit class includes a twice-weekly lecture and a once-a-week discussion section.
Style: 60% Lecture, 5% Film/Video, 30% Discussion, 5% Small Group Activities. Lecture meets twice weekly; discussion sections meet once weekly.
Grading: 50% reports/papers, 30% quizzes, 10% attendance, 10% in-class presentation.

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: Majhor, Samantha Jo
Description: Student may contact the instructor or department for information.

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: Underwood Seru, Davu
Description: We all have ideas about a "Third World," ideas that are not our own. This introductory course will make a problem of the term "Third World" through an investigation of fiction, poetry and drama. A critical study of imperialism and the development, growth and spread of capitalism will guide us. Students will have an opportunity to read and write on works by some of the most celebrated writers of the so-called Third World, including Jamaica Kincaid, Naguib Mahfouz, Gabriel Garcia Marquez and Wole Soyinka. But we will also venture into writing of the American Indian Movement, the struggles for Irish and Black Nationalism, and writers persecuted under "neo-colonial" regimes. The subjects of race and
patriarchy will not be avoided. There are 10 books required for this course but they are all relatively short.

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: Licht, Melissa Vera
Description: Student may contact the instructor or department for information.

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: Hughes, Joseph P
Description: Student may contact the instructor or department for information.

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: Roth-Reinhardt, Anne E
Description: How has American literature addressed what it means to be a citizen? English 1501W 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. Course readings may include, but are not limited to, "Uncle Tom's Cabin," "The Coquette," "The Souls of Black Folk," "Twilight: Los Angeles, 1992," "Song of Myself," "Dutchman," and "Do The Right Thing." This course doesn't sit on the shelf: it will ask students to examine and engage with the world around them.

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: Kamerbeek, Chris
Description: Student may contact the instructor or department for information.

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: St Lawrence, Robert N
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: Goldberg, Brian B
Description: This section of EngL 1701 will concentrate on fiction written during the last twenty years. We will work from as expansive a definition of "fiction" as possible, one that includes "serious" fiction, "experimental" fiction, "genre" fiction, "chick lit," the "verse novel," and the "graphic novel" (for example). The list of authors we might study includes (but is not limited to) the following: Junot Diaz, Jennifer Egan, Haruki Murakami, George Pelecanos, Alan Moore, G. R. R. Martin, Louise Erdrich, Neil Gaiman, William Gaddis, Zadie Smith, Roberto Bolano, Sophie Kinsella, Iris Murdoch, Anne Carson, David Markson. Grades will primarily be based on two exams and a series of in-class writing assignments (i.e. "quizzes").

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: Kang, Jennifer Somie
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: Auyoung, Elaine
Description: What counts as fiction? How is it made and what is it for? What can we discover when we attend more closely to the sentences, style, and structure of a novel or short story? Members of this course will acquire an array of strategies for appreciating and approaching literature in a critical way. We will explore exemplary works of literary fiction written since 1900 to the present, focusing first on Modernism in England and America before turning to a set of more
contemporary works written in very different styles.

EngL 1905 Topics: Freshman Seminar: Minnesota Memoirists
A-F only, 3 credit(s);
Instructor: Sprengnether, Madelon M
Description: This course will examine various forms of memoir writing-through the lens of Minnesota writers, as defined by birth in the state of Minnesota or residence in the state (past or present). Studying Minnesota writers also offers the opportunity to meet some of them and to pose questions to them directly about their books and their writing practices. My aim in bringing authors to class is to give you a chance to hear how living writers develop and sustain their writing lives. This may give you the inspiration and courage to pursue such a life of your own. We will also read and discuss the writing that you bring to class-in a workshop-style format.

EngL 1910W Topics: Freshman Seminar: Hip Hop as Scholarly Inquiry
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Sirc, Geoffrey Michael
Description: Student may contact the instructor or department for information.

EngL 1910W Topics: Freshman Seminar: Our Monsters, Ourselves
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Craig, Siobhan S
Description: We all grow up with monsters. They can be campy and kitsch, or objects of true fear and loathing. But what is monstrousness? What do our monsters reveal about us, as individuals and as a culture? How do they embody our conflicts, ambivalence and denial about our desires and our identity? Does the way we think about race, gender, sexuality, reproduction and the body lead us to give birth to monsters? The promise of monsters can be both disturbing and exhilarating, as it calls into question distinctions like natural vs. unnatural; human vs. animal, male vs. female. This course will focus on literary and cinematic texts—all of them discomforting, some also hilarious—that bring our monsters into focus. What do monsters threaten and/or promise?

EngL 3001V Honors: Textual Analysis, Methods
A-F only, 4 credit(s); Honors, [English major or minor or approved BIS or IDIM program with English area]
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 3001W; Meets CLE req of Writing Intensive
Instructor: Ismail, Qadri M
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: Hughes, Joseph P
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: Bherer, Valerie
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: Calder, Simon Richard
Description: This course provides an introduction to the practical criticism of British and American fiction, drama, and poetry. The primary course objectives are: to develop close/critical reading skills; to analyze works of literature in their historical/cultural contexts; and to appreciate and practice multiple methods of literary criticism.

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: Auyoung, Elaine
Description: What’s the difference between reading a novel for pleasure and reading it for a class? How do we perform close readings? Are literary texts inextricable from their historical contexts? And what, exactly, is the purpose of literary criticism? We’ll pursue these questions in the course of exploring four distinct literary modes: short stories by James Joyce, a novel by Charles Dickens, lyric poems by Emily Dickinson, and an absurdist play by Luigi Pirandello. Our study of these primary texts will be supplemented by a selection of classic and contemporary essays, all of which model different critical approaches in creative and exciting ways. This is a writing-intensive course and you will craft two critical essays and several shorter responses across the semester. To help you develop the analytical methods that you’ll deploy in these assignments, our class meetings will be discussion-based.

EngL 3002 Modern Literary Criticism and Theory
3 credit(s); credit will not be granted if credit already received for: EngL 3802
Credit will not be granted if credit has been received for: ENGL 3002H;
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, differance - 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
Credit will not be granted if credit has been received for: ENGL 3002H;
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: 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 3003W is the first course in a two-semester look at English poetry and prose from its beginning into the 20th century. It focuses on works written between the Middle Ages and the end of the 18th century. You may have enrolled in this course as the first step toward studying English writers, working into modern times, or you may simply want to study writers from earlier centuries in order to gain a historical perspective on more recent literature. Either way, I want you to enjoy the experience, considering at every stage the ways in which early literature is still relevant to us in the present.
Style: Printed, correspondence section
Grading: See attached syllabus

EngL 3004W Historical Survey of British Literatures II
4 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Tandy-Treiber, Ann Marie
Description: This course is supposed to cover British literature from the Middle Ages through the 18th century. I’m not even going to pretend that this is possible to do, comprehensively, in 15 weeks. What we will hit are the most influential highlights, the greatest hits, though not necessarily the most canonical if you will, of this millennium and a half, focusing rather more intently on the last 300 or so of those years. You will get, and you will need it, a wide range of historical context to help you understand these texts; I have no illusions about any given piece of literature’s universal appeal and know that even the best readers need assistance with material that is many generations removed from our own lives and experiences. And, yet, in spite of their apparent differences, we will also be looking for connections, drawing lines of continuity with our own time even as we discuss the contrasts. Additionally, this is a ?W? course, so expect to do a substantial amount of 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:** See attached syllabus

**Exam Format:** Open-book, take-home exam.

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**EngL 3004W Historical Survey of British Literatures II**
- 4 credit(s);
- Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
- Instructor: Decker, Erica Stacey
- **Description:** Student may contact the instructor or department for information.

**EngL 3004W Historical Survey of British Literatures II**
- 4 credit(s);
- Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
- Instructor: Baltzer-Lovato, Jennifer A
- **Description:** Student may contact the instructor or department for information.

**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: Kamerbeek, Chris
- **Description:** This course is designed to make you conversant with the modes and the language of literary studies at the university level and to hone your critical reading skills through theory and praxis. This is a writing intensive course. Therefore, a significant amount of energy will be expended on the good work of conceiving, organizing, executing, proofreading, and “workshopping” effective writing. This particular 3000-level writing intensive course attempts to survey American Literatures and Cultures before the Civil War.

**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: McWhorter, Rachel J.
- **Description:** Student may contact the instructor or department for information.

**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: Marzoni, Andrew P
- **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: Rabinowitz, Paula
- **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: Burdine, Wesley Holmes
- **Description:** Beginning with the rift of the American Civil war of the 1860s, this class will explore the literature that developed throughout the end of the 19th and 20th centuries. We will read a variety of poems and narratives depicting the response to the rise of industrial capitalism as well as shifting attitudes toward race, gender, and sexuality.

**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 year after his death? We will read and discuss approximately ten Shakespeare plays in an effort to answer this question. The readings will represent

**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 Richard II, Romeo and Juliet, A Midsummer Night's Dream, Hamlet, Othello, King Lear, 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 clips from film versions of the assigned play. Writing assignments will include a short explication paper on an assigned passage, and two substantial essay exams.

**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:** Haley, David B

**Description:** In this course, you'll learn to read and to write about the texts of Shakespeare's plays. Class meetings will focus on particular scenes and speeches chosen from THE NECESSARY SHAKESPEARE, ed. Bevington. While this is not a course in theater and the instructor is not offering directed rehearsals, nonetheless everyone will take turns reading Shakespeare's lines aloud, and you'll be asked to memorize the equivalent of five sonnets. Whatever the catalog may indicate, this is NOT a lecture course. On the contrary, at least half your grade will depend on your active participation—which includes doing on time the weekly assignments (quizzes, short papers and paraphrases); there are no exams. The rest of your grade depends on the term paper, which will be corrected and returned for revising. Please note that although this class is not formally labeled "writing-intensive," you will be required to demonstrate, after fifteen weeks, that you can quote and comment upon Shakespeare's text in clear, idiomatic English. The style of your (revised) term paper can raise or lower your course grade. If paying close attention to dramatic texts makes you impatient, you should avoid this course. If on the other hand you look forward to discussing and writing about Shakespeare's characters, or if you enjoy quoting their wonderful language, this is the class for you.

**Style:** 20% Lecture, 20% Film/Video, 40% Discussion, 20% Student Presentation. Reading Shakespeare aloud in class

**Grading:** 33% reports/papers, 50% quizzes, 17% class participation.

**Exam Format:** Quizzes (both in-class and take-home) requiring short essay answers; based on assignments and study questions posted online.

**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:** McCulloch, Stephen Edward

**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:** Tandy-Treiber, Ann Marie

**Description:** In a nutshell, if Shakespeare hadn't written all those plays I wouldn't be using the phrase "in a nutshell," because he created it. Aside from the translators of the King James Bible, no other writer has had as massive an impact on our language as Shakespeare—so much so that reading his plays often feels like an exercise in "spot the cliches" until you realize they weren't cliches when he created them. We can have mixed feelings about his presence in our culture and our literary cannon, but we can't ignore it. In this class, we'll approach several plays through the lenses of history, sociology, psychology, gender, race, linguistics, performance, and whatever else we think of along the way. These plays are simultaneously windows into Early Modern England and living, breathing, often throbbing creations that continue to resonate in our own world. Also: puns! Many of them about sex. Texts (may change some): The Winter's Tale, The Tempest, The Taming of the Shrew, Much Ado About Nothing, King Lear, Richard the Third, Henry V, and Twelfth Night.
EngL 3007 Shakespeare
A-F only, 3 credit(s);credit will not be granted if credit already received for: EngL 3807Credit will not be granted if credit has been received for: ENGL 3007H;Meets CLE req of Literature
Instructor: Baehler, Patricia S
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 3807Credit will not be granted if credit has been received for: ENGL 3007H;Meets CLE req of Literature
Instructor: Utter, Benjamin D
Description: It's a weighty banquet of words Shakespeare sets before us (as anyone will know who has ever risked a herniated disk by picking up the Norton Shakespeare). Bring your appetites to this class, in which we will be gorging on no fewer than seven of Shakespeare's most delicious plays, accompanied by a few choice secondary readings, garnished with occasional film viewings, and topped by a selection of the Sonnets for dessert! We will of course read across the genres--pondering as we go the very notion of genre--so whether you prefer history, tragedy, or comedy, there will be something here for you. As to precisely which plays we will set ourselves, I will tell you that that although we will assuredly cover some of the best-known standards (Lear, Merchant of Venice, Julius Caesar, and The Tempest are strong contenders), probably the fascinating "problem play" Measure for Measure (one of my personal favorites), and possibly Coriolanus (which has a great deal to say to our present political moment), I plan to tailor our reading syllabus at least in part to the needs and interests of the class. There is much to be gained from re-reading, and re-read we will, but if a goodly portion of the class has, for example, managed already to read Othello thrice, then I will be very receptive to the suggestion that we explore something new. Lectures will provide historical context and explicate some of Shakespeare's thematic preoccupations, but our emphasis overall will be on good, close, pleasurable reading. There will be one major essay, a midterm and final examination, yes, and reading quizzes, but all toward the ends not only of understanding what we're reading but also delighting in it. Language doesn't get much richer and sweeter than Shakespeare, folks, and one of the benefits of taking this class will be a head at least slightly more full of his lovely words than when you arrived. To help you achieve this laudable aim, one of the course requirements will be that you learn by heart a few sonnets' worth of verse. Nothing too formidable, I assure you, and I'll be tucking away lines and reciting them right alongside the class.

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, 3807Credit will not be granted if credit has been received for: ENGL 3007H;Meets CLE req of Literature
Instructor: Garner, Shirley Nelson
Description: We will read plays from all of the genres in which Shakespeare wrote: comedies, tragedies, romances, and histories. They will be selected from among "Richard II," "A Midsummer Night's Dream," "Hamlet," "King Lear," "The Tempest," "Antony and Cleopatra," "Othello," and "Measure for Measure." This course will provide you with a perspective on the writer and his body of works, considering him as both a creator and creation of his culture and ours. We will pay attention to Shakespeare's historical, social, literary, and theatrical contexts as well as his continuing, contemporary social relevance.
Style: 10% Lecture, 5% Film/Video, 65% Discussion, 15% Small Group Activities, 5% Student Presentation.
Grading: 85% reports/papers, 15% class participation.

EngL 3020 Studies in Narrative: Real, Unreal, Surreal
3 credit(s), max credits 9, 3 completions allowed;Credit will not be granted if credit has been received for: ENGL 5020;
Instructor: Cucullu, Lois B
Description: "Real, Unreal, Surreal: Realism, its Advocates and Adversaries" examines the emergence of realism as the dominant mode of narration in 19th century novels and their counterparts in journalism and history. What assumptions, we shall ask, underlie this form of narrative and what accounts for its great and continued popularity? Its success will lead us to consider the sudden emergence at the end of the century of its many adversaries and rivals. In little more than a decade emerge the naturalism of Joseph Conrad's Secret Agent, the pioneering sci-fi fiction of H. G. Wells' The Island of Doctor Moreau, the symbolist drama of Oscar Wilde's scandalous Salome, the sensational novel of Bram Stoker's macabre Dracula. On their heels arise the stream of consciousness narration and the surrealist experiments that are the hallmarks of modernism. Our study of narrative will steer a roughly chronological course allowing us to take up some of the most revered and provocative works of the imagination from the mid 19th century to the opening of the 20th, and this to weigh their impact on their time and on our own.

EngL 3022 Science Fiction and Fantasy
3 credit(s);
Instructor: Rowe, Michael H
EngL 3024 The Graphic Novel
3 credit(s);
Instructor: Scandura, Jani
Description: This class takes a broad view of the graphic novel, investigating the rise of the cartoon series in late 19th c and early 20th US history, modernist wordless visual "novels," contemporary graphic novel memoirs, and art, by Henry Darger and others, that might productively be read against the graphic novel genre.

EngL 3027W The Essay
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Anderson, Emily Kathryn
Description: This class poses a bit of a conundrum for me because I don't know why you are taking it. You may be here because you want to hone your academic writing skills, or you may be here because you want relief from such writing and are hoping to branch out. You may simply be here because you need a W credit and this one fit. I can't possibly design a class that will be all things to all students; what I can do is provide you with a bunch of writings that I think are interesting, both for content and style, and ask that you read for (and be prepared to discuss) both those things. I have grouped our readings and writings into four rather arbitrary units: childhood; travel; ?the personal is the historical is the cultural is the personal?; and social commentary.

EngL 3030 Studies in Drama: Intensive Shakespeare
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: Intensive Shakespeare: Four Mediterranean Comedies Shakespeare wrote more comedies than either tragedies or histories, and it is easy to see why, because his irrepressible wit and humor are ubiquitous and are in evidence in the tragedies as well as in the comedies, Macbeth notably excepted even with the Porter Scene. Mediterranean comedies are among his most striking. Two of them are Romances, others have prominent Romance elements. This course will consist in intensive study of four such comedies The Comedy of Errors (1594), A Midsummer Night?s Dream (1595), Pericles (1607), and The Tempest (1610-11), the last play of Shakespeare's sole authorship and his farewell to the stage in effect even if it wasn?t by design. According to a conventional contrast, tragedies end in death, comedies in marriage, and that is often true. But sub-genres may cover much ground otherwise, in space and time as well as character and action, scope and significance. Part of Shakespeare's view of comedies was that they are good for us, even having therapeutic value, like tragedies in their own way. In the Induction to The Taming of the Shrew, a tinker is psyched by a real lord into believing that he himself is a lord who has been in a state of delusion for many years. He is then told that ?Your honor's players, hearing your amendment, / Are come to play a pleasant comedy, / For so your doctors hold it very meet, / Seeing too much sadness hath congealed your blood, / And melancholy is the nurse of frenzy. / Therefore they thought it good you hear a play, / And frame your mind to mirth and merriment, / Which bars a thousand harms and lengthens life. / And the performance of Taming ensues. Like the tragedies and histories, comedies are ultimately and often directly about life and how (not) to live it, and their dialogue shows Shakespeare at his most inventive and expressive.
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.

EngL 3040 Studies in Film: Studies in Film: Pulp Fiction and Melodrama
3 credit(s), max credits 9, 3 completions allowed; Credit will not be granted if credit has been received for: ENGL 3040H;
Instructor: Lekas, Michelle Yvonne
Description: ENGL 3040 considers film history, criticism, theory, and screenings to allow us to discuss the relationship between selected pulp novellas from 1930-1960 and their film counterparts. We will also examine the roots of the melodrama, and how this genre segues off into the plots, visuals, and the cultural underpinnings of post-World War films noir. Film and novella choices include Imitation of Life, Kiss Me Deadly, and The Talented Mr. Ripley. The course includes class participation, two 1,500 word essays, a multiple choice midterm and final, and a 12-entry term journal. We will also use a moodle discussion group to continue discussion through the week(s).
EngL 3040 Studies in Film: The Holocaust in Film
3 credit(s), max credits 9, 3 completions allowed; Credit will not be granted if credit has been received for: ENGL 3040H;
Instructor: Schory, Noemi
Description: Student may contact the instructor or department for information.

EngL 3071 The American Food Revolution in Literature and Television
3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Farber, Lianna
Description: America's relationship with food and eating has changed profoundly over the last 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 tv. 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. Insofar as we eat, we necessarily make choices that have profound implications for our health, our communities, the environment, and those who work in the food industry, broadly defined. This class will trace the American food revolution with the intent of understanding how our current system came to be and thinking through the ethical implications of our daily actions. We begin with the native food landscape in the 1930s dominated by older food traditions (as documented in the WPA "America 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 works by M.F.K. Fisher, James Beard, Julia Child, Eric Schlosser, and Michael Pollan.

EngL 3090 General Topics: Origins of English Words
3 credit(s), max credits 9, 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: See attached syllabus
Exam Format: No exams
EngL 3090 General Topics: Origins of English Words
3 credit(s), max credits 9, 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: See attached syllabus
Exam Format: No exams

EngL 3090 General Topics: Banned Books
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Kamerbeek, Chris
Description: What gets a book in trouble? Typically, there are two kinds of "usual suspects": 1) those texts that don't pull any punches in terms of sex, violence, or profane language and 2) those that contain ideas threatening to social, political or religious power. In this class we will explore what is historically construed as disturbing enough to warrant censorship, as well as whom it disturbs and why. Our aim is to illuminate paradigmatic shifts in attitude toward various kinds of challenging material and bear witness to alternate bursts of cultural progress and regress vis-a-vis a public response to literature. Course texts will include Twain's "Huckleberry Finn," Nabokov's "Lolita," Ginsberg's "Howl," and Rushdie's "Satanic Verses," among others.

EngL 3102 Chaucer
A-F only, 3 credit(s);
Instructor: Farber, Lianna
Description: Geoffrey Chaucer has been considered the "father of English poetry" for almost six hundred years, but just what this approving tag might mean has varied considerably. Some have seen him as a consummate craftsman, others as a deep philosopher, still others as one of the greatest jokers of all times. The Victorians praised his religious stories while excising his bawdy tales of adulterous bed-hopping; later generations found the very fabliaux Victorians censored a salutary antidote to Victorian piety, showing a poet unafraid to engage with the world as it was. Chaucer's writing has been praised by some for its irony, by others for its earnestness; by some for its complex ambiguity, by others for its straightforward way with a good story. In this class we will reach our own conclusions by reading Chaucer's major works, paying attention along the way to his social, political, religious, literary and linguistic milieu.

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 discuss the literature of the Jewish Bible---the Old Testament, to Christians. The first half of the course will cover 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). Our readings will come
from the King James Version, edited by Herbert Marks (Norton, 2012). Instead of exams, you'll do weekly assignments (quizzes, short papers) based on study questions, and you'll write a 2000-word term paper that you'll be allowed to revise. Because this course is meant to develop your biblical literacy, you will need to show, by the end of its fifteen weeks, that you can quote and comment upon the King James text in clear, idiomatic English. The style of your (revised) final paper can raise or lower your grade.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 40% reports/papers, 20% quizzes, 25% written homework, 5% in-class presentation, 10% class participation.

**Exam Format:** Half the weekly quizzes are take-home essays.

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**EngL 3151 Romantic Literatures and Cultures**
A-F only, 3 credit(s);
Instructor: Goldberg, Brian B

**Description:** During the Romantic period in Great Britain (1789-1832), established attitudes about war, sexuality, poverty, aesthetic experience, creativity, and political authority all came under assault. This class will survey some of the literary highlights of the period. Particular attention will be paid to six major poets: William Blake, William Wordsworth, Samuel Taylor Coleridge, Lord Byron, Percy Shelley, and John Keats. Critical and political prose will also be considered, and we will read at least one novel, Jane Austen's Persuasion. Grades will be based on two exams, one paper (7-10 pages), and a series of in-class writing assignments.

**EngL 3161H Honors: Victorian Literatures and Cultures**
A-F only, 3 credit(s); Honors or instr consent
Credit will not be granted if credit has been received for: ENGL 3161;
Instructor: Hancher, Michael

**Description:** Selected aspects of British literature and culture across most of the nineteenth century. Topics include the rise of journalism and the pictorial press; the commodification of literature; industrial, social, and imperial contexts; literary aspects of the visual arts; visual aspects of literature. Principal authors include Elizabeth Barrett Browning, Robert Browning, Alfred Tennyson, Christina Rossetti, John Ruskin, Thomas Babington Macaulay, Charles Dickens, Henry Mayhew, Elizabeth Gaskell, Lewis Carroll, W. S. Gilbert, William Morris, Walter Pater, and Conan Doyle; artists include John Everett Millais, William Holman Hunt, Dante Gabriel Rossetti, Ford Madox Brown, Julia Margaret Cameron, and John Thomson. Journalistic resources (both on the library shelves and online) include the Penny Magazine, the Publisher's Circular, and the Illustrated London News.

**Style:** 30% Lecture, 40% Discussion, 30% Student Presentation.

**Grading:** 50% reports/papers, 25% reflection paper, 25% class participation. The "basic course requirements" (mentioned in the University definitions of course grades) include regular attendance.

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**EngL 3212 American Poetry from 1900**
3 credit(s);
Instructor: Cihlar, James Jay

**Description:** In American Poetry from 1900 we will consider our texts as taking part in a conversation that spans generations. From Wallace Stevens and William Carlos Williams to Rae Armantrout and Bob Hicok, from Allen Ginsberg and Sylvia Plath to Juliana Spahr and Tracy K. Smith, we will hear ideas and intonations echo across decades as if across corners of a room, as one writer draws out the obsessions of another, putting his or her own spin on them. We will see the growing acceptance of the American idiom as a valid source of poetry, as the lines and poems stretch and sprawl, modifying, contradicting, or correcting themselves, as we do in our everyday speech. We will see our poets pluck fragments of language from our increasingly media-saturated lives, framing them in sharp or subtle juxtapositions. As we unpack the methods and meanings on the pages in front of us, we will find ourselves drawn into a discourse lasting one hundred and thirteen years, and counting.

**Style:** 10% Lecture, 5% Film/Video, 55% Discussion, 30% Small Group Activities.

**Grading:** 50% reports/papers, 30% written homework, 10% attendance, 10% in-class presentation.

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**EngL 3222 American Novel from 1900**
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3222H;
Instructor: Rabinowitz, Paula

**Description:** America is a novel—it's new, it's complex, it contains a multiplicity of characters, voices, stories, regions and points of view. This course reads some of the BIG AMERICAN BOOKS of the 20th century to try to figure out what this nation and its narration is all about. Hint: MONEY, SEX, RACE, BOOZE and so forth. Readings include: THE GOLDEN BOWL, THE HOUSE OF MIRTH, U.S.A., THE GIRL, MISS LONELYHEARTS, INVISIBLE MAN, TRIPMASTER MONKEY: HIS FAKE BOOK, OBASAN, ABSALOM, ABSALOM, MAUD MARTHA, and some selected pulp fiction.

**Style:** 50% Lecture, 50% Discussion. Occasional film viewings

**Grading:** 15% mid exam, 75% reports/papers, 10% in-class presentation.

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**EngL 3231 American Drama**
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3231H;
EngL 3601 Analysis of the English Language

4 credit(s);

Instructor: Escure, 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 verbal systems, which are universally shared by all human cultures, whereas writing is a secondary, late development of speech patterns. First, we will 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? specifically 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); 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), and relevant educational applications. Finally, we relate the historical (diachronic) development of English to its contemporary (synchronous) state.

Style: 70% Lecture, 30% Discussion. PowerPoint presentations weekly topic summaries

Grading: 30% final exam. 3 exams (20%, 25%, 25%)

Exam Format: multiple choice, true/false, special questions relating to technical topics
EngL 3711 Literary Magazine Production Lab I
A-F only, 4 credit(s);
Instructor: Cihlar, James Jay
Description: ENGL 3711 Literary Magazine Production Lab I is the first of a two-semester course. In this hands-on, experiential lab, we solicit, acquire, edit, copyedit, design, typeset, proofread, print, publicize, and distribute the 2014 edition of IVORY TOWER, the magazine of art and creative writing by undergraduates at the University of Minnesota--Twin Cities. To inform our work, we will read and study several classics of the field, from theoretical essays to practical manuals. We will solicit and read submissions; write grants, budgets, and schedules; promote the magazine through partnerships and social media; and create a design, mission statement, and theme. Students will write two formal papers, maintain a weekly reflection journal, and give informal presentations.
Style: 10% Lecture, 20% Discussion, 30% Laboratory, 20% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.
Grading: 40% reports/papers, 10% attendance, 10% reflection paper, 10% in-class presentation, 10% class participation, 20% laboratory evaluation.

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: This course combines academic study with experiential learning in order to build more engaged and more critical understandings of literacy, education, multiculturalism, and citizenship. Literature, government studies, as well as sociological, historical, and educational writings will provide a theoretical basis for our inquiries. And as we explore the convergence and divergence between theory and practice, students will work for two hours a week at a participating community organization (K-12 or adult English Language Learning). At all points, the course supports students in thinking through questions of ethics and social justice, and in creating social change through their involvement in community literacy activities.

EngL 3741 Literacy and American Cultural Diversity
4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Literature
Instructor: Na, Eunha
Description: Student may contact the instructor or department for information.

EngL 3883V Honors Thesis
A-F only, 1-4 credit(s), max credits 4, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Philippon, Daniel J
Description: Student may contact the instructor or department for information.

EngL 3960W Senior Seminar: Hip Hop as Scholarly Inquiry
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Sirc, Geoffrey Michael
Description: The seminar will focus on Hip Hop 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, fashion, violence, and a host of others. The class will conduct their inquiry through reading, course discussion, and writing. The goal of the seminar is for students to work steadily through common course reading and writing- as well as material for their own research- to produce a senior research paper, one that represents an exciting academic investigation into a compelling aspect of contemporary culture.

EngL 3960W Senior Seminar: Jane Austen & Virginia Woolf
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Fitzgerald, M. J
Description: In this class we will explore the work of two major figures of English Literature, Jane Austen and Virginia Woolf, separated by a time which saw the great 19th century social and artistic upheavals and developments. Although our focus will be on three novels by Austen (Pride and Prejudice, Emma and Northanger Abbey) and three novels by Woolf (To the Lighthouse, Mrs Dalloway and Night and Day), our discussion will be as wide ranging as the students? interests will dictate, and will span from the literary and stylistic to the social, the historical and the biographical.

EngL 3960W Senior Seminar: Super Sleuths: Modern Detective Fiction
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Cucullu, Lois B
Description: This senior seminar investigates the rising popularity of crime fiction over the course of the 19th century and the appearance of its eventual foil, the modern detective, made legendary by Edgar Allan Poe's Auguste Dupin and Arthur Conan Doyle's Sherlock Holmes. Among the mysteries we'll take up alongside Dupin's and Holmes's stories are Wilkie Collins's Moonstone, Dickens's last and unfinished novel, The Mystery of Edwin Drood, and L.T. Mead's The Sorceress of the Strand. Over the course of the term, we'll consider what gave rise to these texts as well as their effect on the popular
imagination. Delving into them will allow us to pursue the objective of the senior seminar and that is for class members to develop a thesis around one or more of the texts discussed, with the ultimate goal being the completion by each participant of a substantial and original piece of extended writing that will fully satisfy the senior project requirement and serve as a capstone for the major in English.

EngL 3993 Directed Study
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 4152 Nineteenth Century British Novel
A-F only, 3 credit(s);
Instructor: Hirsch, Gordon D
Description: A survey of some representative 19th-century British novels. Likely readings are Pride and Prejudice, Jane Eyre, Hard Times, Cranford, The Moonstone, Middlemarch, Tess of the d’Urbervilles, and two South Sea novellas by Robert Louis Stevenson (The Ebb-Tide and The Beach of Falesa). We will discuss the writers’ responses to such topics as “the condition of England,” genre, gender, the exotic, and the functions of literature and culture in the context of 19th-century Britain. Course requirements include brief oral reports, participation in discussion, and four short papers.
Style: 35% Lecture, 50% Discussion, 15% Student Presentation.
Grading: 60% reports/papers, 10% attendance, 10% in-class presentation, 20% class participation.

EngL 4311 Asian American Literature and Drama
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature
Instructor: Lee, Josephine D
Description: This course focuses on the literary and theatrical contributions of American artists of Asian descent. Through these novels, memoirs, poetry, stories, and plays, we can understand the particular connections between literary form, expression, and production and the social formations of race, ethnicity, nationalism, class, gender, and sexuality. Asian Americans come from a diverse range of national and cultural backgrounds; likewise their literature and drama presents many different perspectives and experiences. This course will not attempt a survey of these works; rather our readings and discussions will reflect particular preoccupations that regularly surface in these works. These include migration (and its accompanying states of disorientation and acts of reinvention), racism and stereotypes, the “road trip,” and redefining home. We’ll pay special attention to Asian American experiences in Minnesota and other parts of the Midwest. This course satisfies the core requirement for the Asian American Studies minor as well as elective requirements for the English major and minor.
Style: 10% Lecture, 75% Discussion, 10% Small Group Activities, 5% Student Presentation.
Grading: 75% reports/papers, 15% attendance, 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 I 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.

EngL 4612 Old English I
3 credit(s); Credit will not be granted if credit already received for: EngL 3612 Credit will not be granted if credit has
been received for: ENGL 5612;
Instructor: Scheil, Andrew
Description: This course is an introduction to the rich language and literature of Anglo-Saxon England (circa. 500-1100). "Old English," or as it is sometimes known, "Anglo-Saxon," is the earliest form of the English language; therefore, the primary course goal will be to acquire the ability to read Old English texts in the original. No previous experience with Old English or any other language is necessary or expected; undergraduates and graduate students are welcome. This course fulfills the literary theory/linguistic requirement for the undergraduate English major. A knowledge of Old English will allow you to touch the most ancient literary sensibilities in the English tradition; these sensibilities are familiar and strange at the same time, as we sense our deep cultural connection to these texts across the centuries, yet at the same time feel that the past is a strange place indeed. The power of Old English literature has profoundly influenced authors such as Tennyson, Pound, Graves, Wilbur, Hopkins, Gunn, Auden, Seamus Heaney, C.S. Lewis, and of course, J.R.R. Tolkien. The first half of the course will be spent on the basics of Old English morphology and syntax, with brief readings and exercises drawn from a variety of Anglo-Saxon sources—magic charms, the bible, riddles, monster tales, medical texts, homilies. In the second half of the course we will translate more extensive selections from religious and historical prose, as well as religious, elegiac, and heroic battle poetry. Style: 50% Lecture, 50% Discussion.
Grading: 20% mid exam, 35% final exam, 15% reports/papers, 15% quizzes, 15% class participation.

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 5040 Theories of Film: War and Film
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Craig, Siobhan S
Description: Paul Virilio famously outrageous statement that "war is cinema and cinema is war? provides the initial provocation for our reading and thinking in this course. Topics to be discussed include: war and the cinematic apparatus? are the camera and the weapon ontologically linked? How are the systems of war and film interdependent, as interlinked and dynamic technologies of visualization, surveillance and representation? Are war and film?fellow travelers? in modernity as they?stage? the human body in space and time? We will also discuss the body as discursive or technological effect, materialized or necessarily immaterial; the phenomenology of war and film; the aestheticization and erotics of violence;?grievable life.? Readings may include texts by Foucault, Baudrillard, Virilio, Butler, Zizek, Sontag, Marinetti, Theweleit, Artaud, Benjamin. Directors to be discussed may include: Pontecorvo, Rossellini, Kubrik, Bigelow, Tarantino, Spielberg, Scott, Coppola.

EngL 5090 Readings in Special Subjects
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: Sprengnether, Madelon M
Description: Student may contact the instructor or department for information.

EngL 5090 Readings in Special Subjects: Comedy
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 5100;
Instructor: Scheil, Katherine West
Description: Comedy has been described as "one of the permanently unsolved problems of literary study." This seminar will focus on what comedy is and how it works, in theory and practice; we will examine a number of theories of comedy and laughter from Aristotle to the present, as well as representative examples of comedy from the early modern period to the present. Topics for discussion may include: What is the role of comedy in society? Why/how do common topics (such as
love, sex, fools, parents/children, death, and society) change and/or endure? Is comedy normative or transgressive? Why has there remained a gap between the theory and practice of comedy?

EngL 5597 Harlem Renaissance
3 credit(s); Grad student or instr consent
Credit will not be granted if credit has been received for: AFRO 3627;
Instructor: Wright, John S
Description: Student may contact the instructor or department for information.

EngL 5711 Introduction to Editing
4 credit(s);
Instructor: Zuckerman, Jeffrey Jay
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. Editor-writer relationship, manuscript reading, author querying, rewriting, style. Some discussion of copy editing. Students develop editing skills by working on varied writing samples.
Grading: See attached syllabus

EngL 5711 Introduction to Editing
4 credit(s);
Instructor: Tortorello, Michael
Description: Student may contact the instructor or department for information.

EngL 5800 Practicum in the Teaching of English
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Daigre, Eric Stephen
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: 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: 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.

EngL 5992 Directed Readings, Study, or Research
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
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: 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: 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: Escure, 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: 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: 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: Baxter, Charles
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
EngL 5992 Directed Readings, Study, or Research
Instructor: Scheil, Katherine West
Description: Student may contact the instructor or department for information.

EngL 8110 Seminar: Medieval Literature and Culture: Premodern Gender
Instructor: Watkins, John
Description: Student may contact the instructor or department for information.

EngL 8150 Seminar in Shakespeare: Shakespeare and Marlowe
Instructor: Garner, Shirley Nelson
Description: We will read eight plays, four of Shakespeare, four of Marlowe, which I think of as treating similar themes. They will include the following: The Jew of Malta, The Merchant of Venice, Edward II, Richard II, Tamburlaine, Macbeth, Dr. Faustus, and King Lear. I will be interested in the historical, cultural, and literary contexts within which these plays were produced. I am especially interested in the ways race, class, and gender figure and don’t figure. I tend to read literature from a feminist and psychoanalytic perspective, and I give considerable attention to class, which in Marlowe is a prominent theme and in Shakespeare a more muted one. Students will write two-page papers on six of the plays, prepare a two-page summary of a collateral reading of their choosing, and write a 12 ? 15 page paper on a topic of your choosing and related to the course.

EngL 8290 Topics, Figures, and Themes in American Literature: North American Imperialisms and Colonialisms
Instructor: Scandura, Jani
Description: This class considers how North American imperialisms and colonialisms—both actual and spectral—have shaped and continue to shape domestic and global cultural imaginaries in the last century and a half. We will engage with literary and artistic traditions that both express and resist the impact of North American (predominately U.S.) colonization of its own citizens and native peoples and on the citizens of other nations, and we will consider the possibilities and limitations of paradigms that engage with questions of imperialism, colonialism, and postcolonialism when confronted with the North American context. Texts by Theodore Roosevelt, Jose Marti, Jessica Hagedorn, Graham Greene, Amy Kaplan, Lan Cao, W.E.B. Du Bois, Haunani-kay Trask, Mark Twain, Mine Okubo, Carlos Fuentes, Riverbend, Zita Nunes, Lisa Yoneyama, Mao Tse-tung, Masumi Hayashi, and others.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
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
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
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
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
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: Hancher, 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: Lee, Josephine 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: 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: Messer-Davidow, Ellen
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: Watkins, John
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: Garner, Shirley Nelson
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: Fitzgerald, M. 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: 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: 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: 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: 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.

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
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: See attached syllabus

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: Journaling into Fiction
OPT No Aud, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Daniel, Judith A
Description: Student may contact the instructor or department for information.

EngW 3110 Topics in Creative Writing: Journaling into Fiction
OPT No Aud, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Daniel, Judith A
Description: Student may contact the instructor or department for information.

EngW 3110 Topics in Creative Writing: Journaling into Fiction
OPT No Aud, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Daniel, Judith A
Description: Student may contact the instructor or department for information.

EngW 3110 Topics in Creative Writing: Journaling into Fiction
OPT No Aud, 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: See attached syllabus

EngW 3110 Topics in Creative Writing: First Person Singular
OPT No Aud, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Hampl, Patricia
Description: This course is devoted to reading works in all three literary genres that employ the first person voice. We will seriously consider long and short examples from poetry and fiction, but the heaviest concentration of readings will be from forms of literary nonfiction (primarily memoirs and personal essays). We will address questions about this narrative voice that comes in for so much criticism?and curiosity (Is the first person voice inevitably self-absorbed? How do you get the authority to narrate from the "I"?) This is primarily a literature course and not a workshop.

EngW 3960W Writing Workshop for Majors: Poetry
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

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
4 credit(s), max credits 8;
Instructor: STAFF
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.

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 to revise creative nonfiction.

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: See attached syllabus

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: Memoir and Memory
4 credit(s), max credits 8;
Instructor: Sprengnether, Madelon M
Description: Memoir and Memory will introduce you to some of the amazing work in cognitive neuroscience regarding the functions of memory formation, retention, retrieval, and degradation or loss. If memory is an unreliable narrator, as both postmodern theory and contemporary scientific studies indicate, how do we understand the writing of memoir?whether as readers or practitioners? The field of research on memory (and brain functioning in general) is exploding with new information. We will look at some of this research?in terms that a layperson can understand?and relate it to some classic and contemporary memoir writing. Some areas of memory formation that we will cover include: how new memories are laid down and retrieved; how diseases of the brain (such as stroke or Alzheimer's) affect memory and personality; how trauma impacts the brain; and how normal processes of aging are involved in the ways we recall our life histories. For variety, we will view and discuss some films, each of which deals with the role of memory in self-construction and understanding. There is also a significant workshop component to this class.

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
S-N only, 4 credit(s);
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

EngW 8170 MFA Practicum: EngW 1101W
S-N only, 3 credit(s);
Instructor: Schumacher, Julie
Description: Student may contact the instructor or department for information.

EngW 8180 Thesis Seminar: Multi-Genre
A-F only, 4 credit(s);
Instructor: Schumacher, Julie
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

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### Ent 4021 Honey Bees and Insect Societies

**3 credit(s);**

**Instructor:** Spivak, Marla

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

### Ent 4021 Honey Bees and Insect Societies

**3 credit(s);**

**Instructor:** Spivak, Marla

**Description:** The course is designed to study the fascinating natural histories and behaviors of honey bees and other social insects (native social bees, some wasps, ants, and termites). These insect societies demonstrate cooperative behavior and collective decision-making with no central authority. Lecture topics include the evolution of social behavior, pheromones and communication, current theories on the division of labor and self-organization, the "superorganism" concept, and social parasitism. This course will appeal to students from a diversity of backgrounds: biology (ecology, zoology, botany/horticulture, agronomy and sustainable agriculture), psychology and political science, and is open to both undergraduates and graduate students. The objectives of the course are: 1) to apply the general principles of biology, entomology and behavior to the study honey bees and other social insects; 2) to stimulate students to think analytically about selected research topics (e.g., whether honey bees use the information encoded in the dance "language"); 3) obtain hands-on experience with management of honey bees and native bee pollinators; and 4) encourage students to actively participate in their education. For students with continuing interest in honey bee management and research, a 3-week field course is offered during the Intersession (May/June).

**Style:** 50% Lecture, 25% Discussion, 25% Laboratory.

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

**Exam Format:** Essay

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### 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.

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### 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.

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### Ent 5011 Insect Structure and Function

**A-F only, 4 credit(s);**

**Instructor:** Kurtti, Timothy J

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

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### Ent 5011 Insect Structure and Function

**A-F only, 4 credit(s);**

**Instructor:** Kurtti, Timothy J
Ent 5025 Field Methods in Insect Taxonomy
1 credit(s);
Instructor: Holzenthal, Ralph W
Description: Student may contact the instructor or department for information.

Ent 5045 Insect Population Dynamics
A-F only, 3 credit(s);
Instructor: Andow, David
Description: This course surveys ways of thinking about changes in numbers of insects and other organisms in space and time. Students learn to (a) diagram ecological systems and use path analysis to understand how a change in abundance of one species will affect abundance of others; (b) understand common methods for measuring population abundance, (c) evaluate alternative hypotheses for regulation of a focal species, using theoretical models for population regulation and time series analysis; and (d) construct and use simple mathematical models to answer specific questions concerning dynamics in a chosen species. Students will prepare for each class meeting by reading classical papers in population dynamics, and develop analytical and computational skills through four problem sets. For a semester project, students will define and analyze a population dynamics problem of their choice.

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

Ent 5275 Medical Entomology
3 credit(s);
Instructor: Fallon, Ann M
Description: Biology of arthropod vectors of human disease. Disease transmission and host, vector, and pathogen interactions are covered. Topics include physiological and morphological adaptations of insects for disease transmission; human immune response to insect vectored pathogens, venoms, etc.; host/pathogen/vector interactions in malaria, trypanosomiasis, onchocerciasis, leishmaniasis, and other tropical diseases; lyme disease; mosquito-borne diseases in the U.S.; World Health Organization and other public health efforts to control insect-borne disease; role of insecticide resistance and other factors contributing to incidence of arthropod-borne disease. Advanced undergraduates and graduate students.
Style: 80% Lecture, 20% Discussion.
Grading: 40% mid exam, 40% final exam, 10% in-class presentation, 10% class participation.
Exam Format: Essay; 5 to 8 short answer questions based on lecture material and assigned readings

Ent 5275 Medical Entomology
3 credit(s);
Instructor: Munderloh, Ulrike G
Description: Biology of arthropod vectors of human disease. Disease transmission and host, vector, and pathogen interactions are covered. Topics include physiological and morphological adaptations of insects for disease transmission; human immune response to insect vectored pathogens, venoms, etc.; host/pathogen/vector interactions in malaria, trypanosomiasis, onchocerciasis, leishmaniasis, and other tropical diseases; lyme disease; mosquito-borne diseases in the U.S.; World Health Organization and other public health efforts to control insect-borne disease; role of insecticide resistance and other factors contributing to incidence of arthropod-borne disease. Advanced undergraduates and graduate students.
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

Ent 5900 Basic Entomology
1-6 credit(s), max credits 12;
Instructor: STAFF
Description: Opportunity to make up certain deficiencies in biological background.

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.

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.

Ent 8300 Graduate Seminar
S-N only, 1 credit(s);
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: Fallon, Ann M
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: Weller, Susan J.
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: Krischik, Vera Aber
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: Mesce,Karen 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: Munderloh,Ulrike G
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: Andow,David
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: Holzenthal,Ralph W
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: Kurtti,Timothy J
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: Ostlie,Kenneth R
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: Spivak,Maria
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,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: Pavone, Carla
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 Initiating 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 1011 Issues in the Environment
3 credit(s); Meets CLE req of Environment
Instructor: Toner, Brandy Marie
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 1905 Freshman Seminar
1 credit(s), max credits 3, 1 completion allowed;
Instructor: Newman, Raymond M
Description: Non-indigenous (exotic) species such as Eurasian water milfoil, zebra mussels, killer bees and kudzu are becoming increasingly common world-wide and are considered one of the major causes of loss of biodiversity. What are these species? From where do they come and how do they get there? What allows some species to invade and become a nuisance? How can we control them?

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 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: Climate change- Myths, Mysteries, & Uncertainties**
- A-F only, 1 credit(s), max credits 6, 6 completions allowed;
- **Instructor:** Griffis,Timothy John
- **Description:** Student may contact the instructor or department for information.

**ESPM 3000 Seminar on Current Issues for ESPM: Climate change- Myths, Mysteries, & Uncertainties**
- A-F only, 1 credit(s), max credits 6, 6 completions allowed;
- **Instructor:** Griffis,Timothy John
- **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:** D'Amato,Anthony William
- **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 srCredit 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);MATH 1031 or MATH 1051 or MATH 1142 or MATH 1155 or MATH 1271 or ESPM 3012 or STAT 3011 or Soc 3811 or equivCredit 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 C.  
Description: Student may contact the instructor or department for information.

ESPM 3425 Atmospheric Pollution: 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: Mullins, Kimberley  
Description: Student may contact the instructor or department for information.

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 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% 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 C.
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 Environment; meets CLE req of Writing Intensive
Instructor: Perry,Jim A
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 C.
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: Byrd, Kimberly Lynn
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 A
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: 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: Allan, Deborah L
Description: Student may contact the instructor or department for information.

ESPM 4216 Contaminant Hydrology
A-F only, 3 credit(s);
Instructor: Gupta, Satish C
Description: Student may contact the instructor or department for information.

ESPM 4295W GIS in Environmental Science and Management
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Jenkins, 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
ESPM 4601 Soils and Pollution  
3 credit(s);  
Instructor: Nater, Ed  
Description: Student may contact the instructor or department for information.

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 4061.  
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: D’Amato, Anthony William  
Description: Student may contact the instructor or department for information.

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.

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**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.

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**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.

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**ESPM 5603 Environmental Life Cycle Analysis**

A-F only, 3 credit(s);

**Instructor:** Mullins, Kimberley

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

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**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

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**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.

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**Experimental and Clinical Pharmacology** 7-159 WDH

**ECP 5220 Regulatory Issues in Drug Research**

1-2 credit(s), max credits 2, 1 completion allowed;

**Instructor:** Birnbaum PhD, Angela K

**Description:** Student may contact the instructor or department for information.
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 8230 Principles of Clinical Pharmacology
  A-F only, 2 credit(s);
  Instructor: Kirstein, Mark Noel
  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
  1-4 credit(s), max credits 8, 4 completions allowed;
  Instructor: Straka, Robert J
  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: 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: Cloyd PharmD, James Cokely
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, Pamela 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)

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 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 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 everyday 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: The essential components of this course are the reflection and development of learners in helping relationships, critical thinking skills (Bloom Taxonomy) for practicing thinkers, and advancement of written and multimodal literacy. To review course requirements, goals and objectives, and additional information about this course, learners 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% Student Presentation, 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: 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 3101 Personal and Family Finances
3 credit(s);
Instructor: Packingham, Ella
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. This course focuses on personal...
and family finances, not corporate or government finances. It will address financial pitfalls such as too much debt and poor spending habits. However, the focus is on financial strategies and tools, economic security, and ways to build assets.

**Style:** 100% Web Based. Online

**Grading:** 25% final exam, 30% special projects, 15% quizzes, 15% written homework, 15% class participation.

**Exam Format:** multiple choice

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**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:** 100% Web Based. Online

**Grading:** 25% final exam, 30% special projects, 15% quizzes, 15% written homework, 15% class participation.

**Exam Format:** multiple choice

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**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:** Newell, Jane E.

**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 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, 5% Film/Video, 30% Discussion, 10% Small Group Activities, 15% Student Presentation, 15% Guest Speakers.

**Grading:** 34% final exam, 19% special projects, 17% quizzes, 14% journal, 9% reflection paper, 7% class participation.

Extra credit up to 20 points is possible

**Exam Format:** Three quizzes containing multiple choice and essay. Lowest score is dropped. Final exam is cumulative consisting of multiple choice and essay.

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**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**

- **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 use 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:** 13% mid exam, 13% final exam, 14% reports/papers, 25% quizzes, 10% written homework, 15% journal, 10% reflection paper. The Cultural Research Paper accounts for 18% of the grade.

**Exam Format:** T/F, Multiple Choice, Short Answer. 40-50 questions.

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**FSoS 3429 Counseling Skills Practicum I**

- **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

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**FSoS 4101 Sexuality and Gender in Families and Close Relationships**

- **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

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**FSoS 4104W Family Psychology**

- **Instructor:** Meyer, Cynthia Jo
- **Description:** Family Psychology addresses processes that take place in families of origin, families of choice and other close relationships within diverse social contexts. Emphasis is placed on evaluating current research on family dynamics within and across generations. In addition to looking at Family Systems Theory, specific topics include: family rituals, biology and family interactions, marital interactions, adoption, lesbian and gay families, aging, and family therapy. While the emphasis is on understanding current family research, the course also focuses on ways the material can be applied to the student's family and relationships as well as professional interactions with clients. Family Psychology is a writing intensive course which means that the course grade is directly tied to both the quality of writing as well as knowledge of the subject.
matter.

Style: 50% Lecture, 40% Discussion. films and videos
Grading: 30% final exam, 60% reports/papers, 5% in-class presentation, 5% class participation.
Exam Format: multiple choice and short essay

FSoS 4104W Family Psychology
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Syvertsen, Amy Kay
Description: Family psychology is founded on the principles of systems theory with the interpersonal system of the family, broadly defined, as the focus of assessment, intervention, and research. Particular attention is paid to understanding the patterns and processes that unfold in interpersonal and family relationships. Using a family systems lens, this course will survey diverse aspects of family life including models of family functioning, family relationship issues, and social, historical, and socioeconomic contexts. 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 on paper, 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: ? Use theory to analyze families and family relationships ? Describe how the study of family psychology differs from individual psychology ? Identify and write critically about family systems and other relational dynamics ? Synthesize theory and scholarly evidence to defend a thesis and draw conclusions ? Recognize and appreciate the ways diversity affects family psychology research and clinical practice.
Style: 30% Lecture, 5% Film/Video, 20% Discussion, 30% Small Group Activities, 10% Student Presentation, 5% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 20% in-class presentation, 10% class participation.

FSoS 4106 Family Resource Management
3 credit(s);
Instructor: Magistad, Beth Maddock
Description: This course examines families as important economic units in society. The course focuses on how families use resource to achieve valued goals. 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. Case studies are used to illuminate common issues of family resource management especially for families with limited resources.
Style: 50% Lecture, 5% Film/Video, 20% Discussion, 20% Small Group Activities, 5% Guest Speakers.
Grading: 33% mid exam, 50% special projects, 16% 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. This 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, 5% 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 12, 3 completions 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 learners' 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 learners with an experience that best advances their thinking and working. This capstone course is further designed to integrate the whole of a student's undergraduate work by requiring learners to complete a professional efolio suitable for use during job interviews upon graduation. To review course requirements, goals and objectives, and additional information about this course, learners are encouraged to view the syllabus on the WEB.
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 5902 Family Education Perspectives
A-F only, 3 credit(s);
Instructor: Englund, Lynn A.
Description: This graduate-level online course provides students with an understanding of the origins, evolution, and critiques of alternative perspectives on family education. Analysis of the implications of these perspectives on family
education at various times in history for family educators, programs, and the family members who participate in family education help family educators shape their personal philosophy of family education. This course is required for students enrolled in the master of education (M.Ed.) program and students enrolled in the parent and family education licensure program as an essential component of their preparation for practice in the family education field. The course is not recommended for undergraduates because of its fast pace, difficult reading load, and expectations for graduate-level participation and work load.

**Style:** 100% Web Based. Course consists of 14 online modules, each starting on Friday and continuing through Thursday. Ungraded online chats are held on Wednesdays, 8-8:45 PM during odd-numbered modules plus module 14.

**Grading:** 10% reports/papers, 4% special projects, 16% reflection paper, 70% other evaluation. Weekly forum discussions (50 pt/wk x 14 weeks)

**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:** Walker, Susan K
- **Description:** Students will analyze and critique parent-child interaction theory and research, consider implications for parent-child relationships and parents? and children?s development, and apply this course material to professional work with families.
- **Style:** 10% Lecture, 10% Film/Video, 50% Discussion, 10% Small Group Activities, 10% Guest Speakers. this course is 100% delivered online. Readings, discussion, synchronous chat and assignment submission are done online.
- **Grading:** 50% reports/papers, 15% reflection paper, 35% class participation.

**FSoS 5944 Parent Education Curriculum**
- **A-F only, 2 credit(s);**
- **Instructor:** Walker, Susan K
- **Description:** How parent learning/development, child development, and family systems theories influence curriculum approaches/materials in parent education. Student develop construct, critique, and select curriculum.
- **Style:** 10% Lecture, 60% Discussion, 20% Small Group Activities, 10% Demonstration. This is an 8 week course delivered entirely online.
- **Grading:** 50% reports/papers, 10% reflection paper, 40% class participation.

**FSoS 5945 Teaching and Learning in Parent Education**
- **A-F only, 2 credit(s);**
- **Instructor:** Cline, Heather Marie
- **Description:**

**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:** Mendenhall PhD, Tai Justin
- **Description:** This course is an introduction to qualitative research methods, particularly as it relates to family topics It is intended for graduate students in family science and related fields. The course includes exploration of epistemological, ontological, and philosophical foundations of qualitative methods and how these relate to theoretical approaches. Several schools of thought will be examined, including phenomenology, ethnography, and grounded theory. Feminist, content analytic, narrative, and program evaluation influences will also be incorporated. Course emphases will be placed on design/method of inquiry, interviewing techniques, analysis, ethical considerations, cross-cultural sensitivities, and write-up of qualitative work for publication in refereed journals.
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, 30% Discussion, 20% Small Group Activities, 20% Guest Speakers.  
Grading: 22% final exam, 22% quizzes, 13% class participation, 33% other evaluation.

FSoS 8039 Clinical Interventions for Couples  
A-F only, 3 credit(s);  
Instructor: Doherty, William J  
Description: This course is designed to provide therapists-in-training with advanced theoretical and evidence-based information regarding couple and marital therapy, and the relational treatment of sexual dysfunction. Emphasis will be placed on relationship processes that impact sexual functioning and sexual identity. The course will also briefly touch on medical interventions for sexual dysfunctions of organic etiology. Concepts of intimacy and sexuality will be differentiated and discussed in detail. Students are encouraged to be open to helping create a learning environment that is built upon critical thinking, self-disclosure, collegiality and respect.  
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 8150 Topics in Family Social Science: Ongoing Seminar: Immigrant & Refugee Families  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Solheim, PhD, Catherine Ann  
Description: The aim of this ongoing seminar is to engage as a learning community of students, faculty, and community collaborators to understand immigrant and refugee families locally and globally. The long-term goal is to develop evidence-based educational and clinical interventions to support families and the organizations that serve them. Integration of theory, research and educational/clinical praxis will guide the learning activities of this year-long ongoing seminar and will center on different local and international research projects. Readings, discussions, and research experiences will vary depending on project need and stage of development. The seminar will meet 1.5 hours weekly; learners will also be required to participate for an average of 2 hours per week in faculty-led research activities per University guidelines of 3 hours of learning effort for a one-credit course.  
Style: 5% Film/Video, 25% Discussion, 70% Laboratory.  
Grading: 100% class participation. This course is offered S/N. To achieve satisfactory completion of the course, learners must attend all class meetings and be actively engaged in discussions and the research projects to which they are assigned.  
Exam Format: NA

FSoS 8150 Topics in Family Social Science: Ongoing Seminar: Mass Trauma  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Wieling, Elizabeth  
Description: The Mass Trauma seminar is designed to develop a collaborative scholarly community within FSoS as well as with international and local colleagues focused on a wide range of trauma related topics. We will engage in a variety of activities that offer learners opportunities to gain knowledge, skills, and experiences in clinical research, writing, and community engagement.  
Style: 10% Lecture, 5% Film/Video, 50% Discussion, 25% Small Group Activities, 5% Field Trips, 5% Guest Speakers.  
Grading: 100% class participation.

FSoS 8150 Topics in Family Social Science: Ongoing Seminar: Immigrant & Refugee Families  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Wieling, Elizabeth  
Description: The aim of this ongoing seminar is to engage as a learning community of students, faculty, and community collaborators to understand immigrant and refugee families locally and globally. The long-term goal is to develop evidence-based educational and clinical interventions to support families and the organizations that serve them. Integration of theory, research and educational/clinical praxis will guide the learning activities of this year-long ongoing seminar and will center on different local and international research projects. Readings, discussions, and research experiences will vary depending
on project need and stage of development. The seminar will meet 1.5 hours weekly; learners will also be required to participate for an average of 2 hours per week in faculty-led research activities per University guidelines of 3 hours of learning effort for a one-credit course.

**Style:** 5% Film/Video, 25% Discussion, 70% Laboratory.

**Grading:** 100% class participation. This course is offered S/N. To achieve satisfactory completion of the course, learners must attend all class meetings and be actively engaged in discussions and the research projects to which they are assigned.

**Exam Format:** NA

**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:** Borden,Lynne Marie  
**Description:** Orientation of new students to 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, professional development and roles they will play as Family Social Science Graduate Students and as family science professionals.  
**Style:** 20% Lecture, 60% Discussion, 20% Guest Speakers.  
**Grading:** 100% in-class presentation.

**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 individual/dyadic and group supervision in addition to the supervision you receive at your clinical placement site. Supervision will consist of bi-weekly individual and group meetings that will include 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.

**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 individual/dyadic and group supervision in addition to the supervision you receive at your clinical placement site. Supervision will consist of bi-weekly individual and group meetings that will include 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.

**FSoS 8297 Supervision of Supervision**  
S-N only, 1-3 credit(s), max credits 12, 12 completions allowed;  
**Instructor:** Harris,Steven Michael  
**Description:** Student may contact the instructor or department for information.

**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:**

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**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: See attached syllabus
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 an 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: Szydlowski, Martin Adam
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: Friese, Brian J
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 & Derivatives I
A-F only, 2 credit(s); 3001, 4121, 4321 (can be concurrent), CSOM major
Credit will not be granted if credit has been received for: FINA 4523;
Instructor: Ai, Hengjie
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: Le, Thanh Trung
Description: Student may contact the instructor or department for information.
Fina 6522 Introduction to Derivatives and Financial Risk Management
A-F only, 2 credit(s);
Instructor: Ai,Hengjie
Description: Student may contact the instructor or department for information.

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 8804 Advanced Continuous Time Finance
2 credit(s);
Instructor: Goldstein,Robert S
Description: Student may contact the instructor or department for information.

Fina 8812 Corporate Finance I
2 credit(s);
Instructor: Szydlowski,Martin Adam
Description: Student may contact the instructor or department for information.

Fina 8820 Topics in Corporate Finance
A-F only, 2 credit(s), max credits 4;
Instructor: Ai,Hengjie
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: Taipale,Kaisa Elina-Maria
Description: Student may contact the instructor or department for information.

FM 5011 Mathematical Background for Finance I
4 credit(s);
Instructor: Liu,Zhen
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
4 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 "Suomen mestari 1," which is accompanied by a CD which will be used in class. 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); 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); 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 "Suomen mestari 1", which is accompanied by a CD which will be used in class. 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

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**Fin 4003 Intermediate Finnish**

2 credit(s);1004 in another language or passing score on LPE or grad studentCredit 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

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**Fin 4011 Advanced Finnish**

2 credit(s);Grad studentCredit 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.

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**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 2001W Introduction to Fisheries, Wildlife, and Conservation Biology**

3 credit(s);Meets CLE req of Environment; meets CLE req of Writing Intensive

**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 I 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.

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**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, focusing in large part on the constraints imposed by the aquatic environment. The laboratory will cover anatomy and diversity of fishes, focusing 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 4401 Fish Physiology and Behavior**  
3 credit(s);  
**Instructor:** Venturelli, Paul A  
**Description:** More than half a billion years after the first fish-like creature impressed itself upon the fossil record, modern fishes are represented by more than 25,000 species that fill almost every aquatic habitat. In Fish Physiology and Behavior, we journey through time and around the world to explore the fascinating array of physiological and behavioral adaptations for life in these aquatic habitats, and how these adaptations govern everything from individual well-being and fitness to species distributions and interactions. The course builds on the understanding of fish biology and physiology that you acquired though FW4136 or a similar course. Specific topics include homeostasis (e.g., osmoregulation, gas exchange), bioenergetics (i.e. growth, feeding), reproduction, movement, and ecotoxicology. Emphasis is on those adaptations and habitats that are relevant to conservation, management, aquaculture, and anthropogenic change (especially in Minnesota). We approach these topics through interactive lectures, readings, case studies, a short review paper, and two exams. This course is required for FWCB students in the Fisheries area of specialization, and can also count towards the American Fisheries Society's Certified Fisheries Professional designation.

**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.

**FW 8394 Research in Fisheries**
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.

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: 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: 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 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: 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: 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: Cornicelli, Lou
  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 225 Food Science & Nutrition

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 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 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 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 asanswers and essays

FScN 1112 Principles of Nutrition
3 credit(s);
Instructor: Roth-Yousey, PhD, MPH, RD, LN, Lori L
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. 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
Style: Online
Grading: See attached syllabus

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

**FScN 1112 Principles of Nutrition**
3 credit(s);
**Instructor:** Arikawa, Andrea Yukie
**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. 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
**Style:** Online
**Grading:** See attached syllabus

**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.

**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

**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.

**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);**
- **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**

- **1 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 3480 Topics in FScN**

- **1 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 3480 Topics in FScN**

- **1 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 3480 Topics in FScN**

- **1 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);**
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: Tyl, Catrin
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 4667 Senior Seminar for the Didactic Program in Dietetics
S-N only, 2 credit(s);
Instructor: Earthman, Carrie P
Description: Student may contact the instructor or department for information.

FScN 5122 Food Fermentations and Biotechnology
A-F only, 2 credit(s);
Instructor: O'Sullivan, Daniel J
Description: Student may contact the instructor or department for information.

FScN 5131 Food Quality for Graduate Credit
A-F only, 3 credit(s);
Instructor: Schoenfuss PhD, Tonya C
Description: Student may contact the instructor or department for information.

FScN 5312 Food Analysis
A-F only, 4 credit(s);
Instructor: Ismail, Baraem
Description: Student may contact the instructor or department for information.

FScN 5461 Food Packaging
2 credit(s);
Instructor: Bernard, Stuart N
Description: Student may contact the instructor or department for information.
FScN 5601 Management of Eating Disorders
3 credit(s);
Instructor: Lampert, Jillian Garnet
Description: This course is open to undergraduate and graduate students in nutrition, psychology, medical, nursing, public health, and other related disciplines or by permission of instructor. The purpose of this course is to provide the student with an understanding of etiology, occurrence, course, treatment, and prevention of eating disorders from a multidisciplinary perspective. In addition, this course will examine the roles and responsibilities of eating disorder treatment team members of varying types across a variety of treatment milieus. The instructor will provide a framework for the course material, and invite regular participation by students. A number of eating disorder professionals from the community will come into the class and speak about how they are involved in eating disorder treatment. Many of these are interactive presentations. Students have the chance to explore the use of yoga, art therapy, music therapy, and other therapeutic interventions commonly used in the treatment of eating disorders. The course format will include lecture, discussion, and case studies incorporating readings and other information. The course projects mimic typical work in an eating disorder treatment setting, giving students an idea of day to day work that clinicians complete in the course of working with individuals with eating disorders.
Style: 35% Lecture, 40% Discussion, 25% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 20% special projects, 10% in-class presentation.

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 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.

Forest Resources 115 Green Hall

FR 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 FNRM major. During the semester, students will be introduced to key issues and concepts 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 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 SMART commons is and how to make use of it. 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 specific resource and associated geospatial data to their field of study and, g) assess their desire to continue their education beyond the baccalaureate level. Class URL: http://www.forestry.umn.edu/courses/FR1001/index.html Co-Instructor: Ek, Alan Ryan Co-Instructor: Kilgore, Mike (CNR-Newman Comm Impact Award; CNR-RC Newman Tchg Award) Open Faculty Award Information Co-Instructor: Davenport, Mae Allen (CNR-Newman Comm Impact Award) Open Faculty Award Information

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: Reich, Peter Bernard
Description: Student may contact the instructor or department for information.

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: Karwan, Diana Louise
Description: Student may contact the instructor or department for information.

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

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: Introduction to landscape ecology at different scales in time and space. Ecological phenomena that create patches and heterogeneity on the landscape including landform, disturbances such as fire and wind, and biological alteration of the environment by organisms such as trees, deer, insects, and earthworms. Effects of fragmentation on species and ecological processes, and how landscape structure and fragmentation affect movement of invasive species and the design of reserves. Broad scale patterns at scales from subcontinental to local, including interactions with trophic cascades, and the nature of major landscape transitions between the prairie, deciduous forest and boreal forest biomes. Quantifying landscape pattern and modeling of landscape processes. Principles of landscape ecology as framework for landscape research, analysis, conservation, and management.

**Style:** 60% Lecture, 20% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.

**Grading:** 25% mid exam, 25% final exam, 50% written homework.

**Exam Format:** Mostly short essay with a few short answer and questions that require some calculations

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.
FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Ek, Alan Ryan
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: Eckman, Karlyn
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: 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: Student may contact the instructor or department for information.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Nelson, Kristen C.
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: Burk, Thomas Edward
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: Kilgore, Mike
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: Current, Dean Alan
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: Reich, Peter Bernard
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: Frelich, Lee E
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: Carlson PhD, Stephan Paul
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: Bolstad, Paul V
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: David, Andrew J
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: D'Amato, Anthony William
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: 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: 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: Student may contact the instructor or department for information.

FR 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Karwan, Diana Louise
Description: Student may contact the instructor or department for information.

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: Reich, Peter Bernard
Description: Student may contact the instructor or department for information.

FR 5114 Hydrology and Watershed Management
3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: FR 3114;
Instructor: Karwan, Diana Louise
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: Frelich, Lee E
Description: Introduction to landscape ecology at different scales in time and space. Ecological phenomena that create patches and heterogeneity on the landscape including landform, disturbances such as fire and wind, and biological alteration of the environment by organisms such as trees, deer, insects, and earthworms. Effects of fragmentation on species and ecological processes, and how landscape structure and fragmentation affect movement of invasive species and the design of reserves. Broad scale patterns at scales from subcontinental to local, including interactions with trophic cascades, and the nature of major landscape transitions between the prairie, deciduous forest and boreal forest biomes. Quantifying landscape pattern and modeling of landscape processes. Principles of landscape ecology as framework for landscape research, analysis, conservation, and management.
Style: 60% Lecture, 20% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.
Grading: 25% mid exam, 25% final exam, 40% written homework, 10% in-class presentation.
Exam Format: Mostly short essay with a few short answer and questions that require some calculations

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: Student may contact the instructor or department for information.

FR 8101 Research Problems: Physiological Ecology
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Montgomery, Rebecca Anne
Description: Student may contact the instructor or department for information.

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 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 8105 Research Problems: Silviculture
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Nagel, Linda M
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: Student may contact the instructor or department for information.

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 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: 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: Nelson, Kristen C.  
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 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: Hoganson, Howard M  
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 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 C.  
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.
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.
Exam Format: All exams evaluate listening, vocabulary, grammar, writing, reading and culture.

Fren 1002 Beginning French
5 credit(s); 1001 or equiv
Credit will not be granted if credit has been received for: FREN 4022;
Instructor: Estrem, Mary Elaine
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: Class Time: 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 1001 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 a 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: See attached syllabus
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: 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 a student group.
Fren 1003 Intermediate French
5 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
Grading: Grade: 15%: final exam, 20%: reports/papers, 6%: chapter quizzes, 7%: class participation, 32%: other evaluation: written exams (22.5%), writing assignments on movie, on-line writing assignments (9.5%), 15%: oral exams, 5%: workbook exercises.
Exam Format: Exam Format: Exams assess a student's listening, reading, speaking and writing proficiency and cultural knowledge and understanding. Oral exams are administered in pairs, written exams involve answering short questions and essay writing.

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.

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 1002 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 1002 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 <a href="http://langtest.umn.edu/imdatesGPT.html">http://langtest.umn.edu/imdatesGPT.html</a>

**Style:** Language instruction

**Exam Format:** Grammar exercises, essays

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**Fren 3016 Advanced French Grammar and Communication**
3 credit(s);
Instructor: Cherbuliez, Juliette

**Description:** Fren 3016 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 3016, 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

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**Fren 3016 Advanced French Composition and Communication**
Fren 3018 French Oral Communication
3 credit(s);
Instructor: Mougel, Patricia M.
Description: This course is designed for students who want to develop their French speaking and listening skills at the advanced level of proficiency while learning about current events in France in particular those related to educational, social, business and environmental issues. We will make extensive use of authentic written (newspapers, magazines) and visual texts (photographs, documentaries, news broadcasts). Journal writing (to develop your range of vocabulary), development of speaking strategies to interpret and discuss authentic audio/video materials, to express and support opinions, as well as short oral presentations on current events will be emphasized. This course is ideal for students who are planning to study abroad or are returning from a study abroad experience, and those interested in current events in France and the Francophone world. 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: 30% Discussion, 40% Small Group Activities, 30% Student Presentation.
Grading: Oral news presentation: 10% Debate: 10% Vocabulary quizzes: 10% Journals: 20% Academic presentation: 25% Final exam (listening): 15% Final exam (speaking): 10%

Fren 3016 Methods in French and Francophone Studies
3 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Chaouat, Bruno
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 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: 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. The theme and content of each section will vary according to instructor. "Language, Literature, Experience" Students might wonder why national literatures are still relevant in the age of tele-technologies and globalization. What can such a seemingly old-fashioned medium communicate in an era of instantaneous and successful? communication throughout the world in the age of Google? Is literature a cultural dinosaur, a mere vestige of our previous relation to the world? Can literature, which seems always to leave something to be desired, survive a culture of speed, performance, and instant gratification? Can it survive an era of one click? information and knowledge? This course endeavors to show that the literary medium constitutes the privileged means of conveying human experience through language. We will read 19th and 20th century novels, short stories, plays, poetry, as well as essays on literature. We will explore the melancholy of post-Revolution, Napoleonic wars, modern experience and trauma, mechanical reproduction and industrial war (Francois-Rene de Chateaubriand, Charles Baudelaire, Honore de Balzac, Marcel Proust, Louis-Ferdinand Celine, Nathalie Sarraute,) We will tackle the concept of committed literature? as defined by Jean-Paul Sartre immediately after WWII. We will examine what occurs to literature and its theory after WWII and the Holocaust (Maurice Blanchot, Georges Bataille, Marguerite Duras, Patrick Modiano.)
Style: 30% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.

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: FREN 3101W ("Imagining Monsters") 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 section, we will study figures of monsters and the workings of the imagination in Rabelais? Gargantua, the tales of Perrault, Diderot's Le Reve de d'Alembert and Duras' Oirika, as well as in the poetry of Baudelaire, the films of Georges Melies, Jacques Tourneur, Jean Cocteau, George Franju and Agnes Varda, the paintings of Odilon Redon, and the comic novels of Jacques Tardi.
Style: 30% Lecture, 20% Film/Video, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.
Fren 3101W Methods in French and Francophone Studies  
4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive  
Instructor: Ferraris-Besso, Caroline  
**Description:** SICK, HEALTHY, DEAD, ALIVE: BODIES. In this course section, we will study bodies, healthy, sick, dead or live ones: how they have been represented, examined, dissected, in fiction, film, and art; how they have been seen/used as tools of liberation and/or oppression in French and Francophone cultures and literatures. Starting in the Middle Ages, this introduction to methods in French Studies will span several centuries and media to explore how the role and place of bodies and corpses have evolved until our possible disembodiment in the digital age. Readings will include texts by Marguerite Yourcenar, Herve Guibert, Samuel Beckett, Charles Baudelaire, poems by Marot, Sceve, du Bellay, Baudelaire. Visual materials will include paintings by Gauguin and Matisse, artworks by Christian Boltanski, early 20th century photographs, movies, and Bastien Vives' comic book Le Gout du chlore.

Fren 3240 Topics in Ancien Regime Literature: Women Who Kill and The Men Who Love Them  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Cherbuliez, Juliette  
**Description:** "Women Who Kill and the Men Who Love Them: French Tragedy" French classical theater can be said to be about the containment of violence to certain arenas, registers, and members of society. Tragedy in 17th-century France evolved, eventually to eliminate all signs of physical violence from of actors? hands and relegate them either the to script or the to stage?s wings. If theater uses the occlusion of violence to structure tragedy as a genre, it also presents this ordering of violence as an essential aspect of the social order, and of the theater-goer?s experience. We will study classical theater with particular attention to the extremes of violence - passion and murder - and their relationship to gender. Treating theater as both text and performance, we will also bear in mind the cultural and historical specificities of the period. We?ll read plays that define the relationship between violence and gender in a variety of ways, such as Andromaque, La Thebaide, Britannicus, Dom Juan, Cinna and Medee. Films/videos by Van Trier, Bluwal, Pasolini, Eastwood.

Fren 3340 Topics in Modern French Literature: Symbolism  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Wall-Romana, Christophe M  
**Description:** This course will survey the French Symbolist movement in poetry, the novel, theater and the visual arts, from the 1860s to the turn-of-the-century. The course will center on poetry, around which the notion of Symbolism first coalesced, especially Charles Baudelaire, Edgar Poe and the so-called "poetes maudits," (Paul Verlaine, Arthur Rimbaud and Stephane Mallarme). In particular, we will explore poetic innovations linked to Symbolism such as free verse, the prose poem, and the visual poem, and new esthetic ideas related to clarity/obscurity, ornamentation, music, gender/sex and death. We will study broader tendencies, individuals and groups, such as the Decadents and the Incoherents, Alfred Jarry's Ubu, women writers (Marceline Desbordes-Valmore, Marie Krysinska, Rachilde), and the emergence of post-Impressionism in painting, of the comic strip and poster art, and of photography and the cinema. Since the notions of modernity and modernism have key roots in French Symbolism, we will pay special attention to the link between the latter and contemporary critical developments.  
**Style:** 30% Lecture, 10% Film/Video, 40% Discussion, 10% Small Group Activities, 10% Student Presentation.

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)
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

Fren 3650 Topics in French/Francophone Cultures: France's "Civilizing" Mission

3 credit(s), max credits 9, 3 completions allowed;

Instructor: Preckshot,J E

Description: "Education in France and the Francophone World: A "Civilizing Mission"" What is an education? Does it always take place in a classroom? What is its ultimate purpose? What role do societal norms play in our understanding of an education and the forms it takes? What political stakes are involved in the definition of education and the structures created to carry out its mission? Such questions will be examined in the course of the semester through a consideration of literature, film, historical and pedagogical documents and theoretical essays treating or representing educational processes and the ways in which they have been promulgated and dispensed in France and the francophone world. Starting in the Enlightenment and in the tension between societal imperatives and the requirements for "natural man" that finds expression in Rousseau's Emile, ou l'education, we will look at various encounters between "enfants sauvages" and "civilizing" institutions that train them to function in society, as well as how the concept of "civilization" has evolved-in sometimes perverted forms (racism, for example)-over time and across national boundaries. If the liberal philosophies of the Enlightenment promoted the democratization of society, extending education beyond the purview of the Church and privileged classes able to hire private tutors to educate their children, leading eventually to the establishment of mandatory public schooling during the Third Republic for the purpose of forming citizens, they did not resolve entirely the paradox of two coexistent ideologies: on the one hand a romantic idealization of the "bon sauvage" leading a primitive (by Western European standards) existence in harmony with nature, and on the other, a persistent view of French cultural exceptionalism which justified the taming of France's "wild children" by the greater good of the spread of "civilization." Important questions we will consider are what motivated France's "civilizing mission," which had its beginnings in the cultural domination of the non-French speaking margins of continental France by the French-speaking center before it spread to France's overseas empire; what is gained and what is lost when one culture (and language) comes to dominate others within and outside of France; what the benefits and pitfalls are of the highly centralized and uniform French educational system; and what the legacy of the civilizing mission is in the multi-cultural and multi-racial France of the late 20th-century up to today. Examples of films we will view are: Francois Truffaut's "Enfant sauvage," Gaston Kabore's "Wend Kuuni," Nicolas Philibert's "Etete et avoir," Bassek ba Kobbio's "Sango Malo," and Laurent Cantet's "Entre les murs." Texts (or excerpts thereof) may include works by writers Jean-Jacques Rousseau, Colette, Mariama Ba, Patrick Chamoiseau, and Farida Belghoul, as well as theoretical writings by Claude Levi-Strauss, Michel Foucault, Jean Piaget, and Paolo Freire.

Fren 3681 Literature and Transgression

3 credit(s);3015, 3016Credit will not be granted if credit has been received for: FREN 3781;Meets CLE req of Literature

Instructor: Chaouat,Bruno

Description: In the immediate aftermath of September 11, 2001, German avant-garde composer Karlheinz Stockhausen declared that the terrorist attacks were ?the greatest work of art imaginable for the whole Cosmos.? European literature is full of instances of rivalry between art and destruction. The fascination of the artist/writer for destruction may be related to a historical caesura in Western civilization--artistic and poetic revolution, modern warfare (total war), fascist and communist revolutions, totalitarianism and state terror. This course will focus, from a critical perspective, on this fascination as it has developed in French literature and literary theory. We will focus less on crimes or transgression within literature or narrative, than on the connection between the literary act and crime/transgression. We will trace through a critical lens literature?s fascination for transgression to the French Revolution and especially the Reign of Terror, then to the emergence of modern poetry in the mid-19th century, and finally to the avant-garde movements of the 20th century. Taught in English. Reading/writing assignments in French and is for French majors or minors.

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 4002 Beginning French

2 credit(s); Grad student Credit will not be granted if credit has been received for: FREN 1002; FREN 1022; FREN 4022

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

Grading: 30% written exams, 15% oral exams, 13% final exam, 12% reports/papers, 13% special projects, 12% quizzes, 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; FREN 1022; FREN 4022

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: 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 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: 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
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 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 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 8230 Critical Issues: Criticism and Thought
A-F only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Brewer, Daniel
Description: "Worlding the French Eighteenth Century" The aim of this course is to ask how the French eighteenth century can be thought globally. One answer lies in tracking the fairly recent shift in eighteenth-century studies towards more spatially and conceptually expanded paradigms in order to bring to light the multiple ways in which a Eurocentered form of global or `planetary' consciousness took shape in the early modern period. Mapping the world-wide crossings of commerce, people, and ideas, Europeans described their encounter with other peoples and cultures, charting flows of knowledge, affects, and currency in the pursuit of reimagining themselves. We shall also ask in what sense this global French eighteenth century anticipates the virtual circuitry of identities, images, commodities, and information that characterizes a more contemporary globalization, betokening a certain modernity. To take the measure of that anticipation, and to understand critically what is historically the most specific, yet perhaps also the most modern, about the French eighteenth century, we will relate its texts to debates in contemporary geocriticism and spatial theory. (This course will be conducted in English.)

Fren 8230 Critical Issues: Criticism and Thought
A-F only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Rothe, Matthias
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.

Style: 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.
Grading: 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.
Fren 8230 Critical Issues: Criticism and Thought
A-F only, 3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Schmieder,Falko
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.
Style: 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.
Grading: 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.

Fren 8420 Critical Issues: Francophone Literature: La Francophonie medievale
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Noakes,Susan J
Description: Introduction a la francophonie medievale. This course will provide an introduction to the emergent field known as "la francophonie medievale," that is, the literature written in French outside the borders of what is today France during the Middle Ages. Most of this literature was written during the Crusades and concerns colonization of the Eastern Mediterranean. In addition to this literature, the class will study theoretical issues relating to this body of material. There will also be occasion to address representations of cultures and peoples outside of "France" written within its borders. The course requires a reading knowledge of modern French, but will be conducted in English.

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.

Fren 8992 Directed Readings for Graduate Students
1-5 credit(s), max credits 25, 25 completions allowed;
Instructor: Franklin-Brown,Mary
Description: Student may contact the instructor or department for information.

Fren 8420 Critical Issues: Francophone Literature: La Francophonie medievale
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Noakes,Susan J
Description: Introduction a la francophonie medievale. This course will provide an introduction to the emergent field known as "la francophonie medievale," that is, the literature written in French outside the borders of what is today France during the Middle Ages. Most of this literature was written during the Crusades and concerns colonization of the Eastern Mediterranean. In addition to this literature, the class will study theoretical issues relating to this body of material. There will also be occasion to address representations of cultures and peoples outside of "France" written within its borders. The course requires a reading knowledge of modern French, but will be conducted in English.

French and Italian 314 Folwell Hall

Frit 3880 Topics in French and Italian Literatures and Cultures: Political Passions
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ferlito,Susanna Florenc
Description: "Political Passions: Towards Just Nations" How did European writers from the 16th century to the late nineteenth-century understand the power of emotions to move people and particularly leaders to act politically? How do we understand the emotions and their relation to knowledge? Are emotions universal or local and particular to time and place? The Italian nation-building process known as the Risorgimento will offer an analytical fulcrum for us to examine how different writers and political thinkers sought to understand and harness the emotions (compassion, love, hate, anger, envy, resentment, etc) to fuel political change as well as to address social, gender, and political injustice in society and cement individual and collective emotional attachment to the nation. Authors read will include: Machiavelli, Rousseau, Kant, Renan, Mazzini, Comte, JS Mill, Belgiojoso, D'Azeglio, Pisacane, De Amicis, Nietzsche. Each week, students will be responding to each reading with a short moodle exercise to prepare them for class discussion (300 words) and posting a question for group discussion based on the reading. These written excercises will be graded on a scale of 1-10. (Worth 30%), with class discussion 30%. A final research paper of 12-15 pages 40%. Course is taught in English. Students of Italian and French will be reading in their target language, discussion will be in English. *This section is for students who have not taken Ital 3015 and/or are a French major/minor (or do not study either Italian or French). If you have taken Italian 3015 you can enroll under the Italian section number (3550).

Frit 5257 Passionate Beings: Literary and Medical Problematics in Italy and France from 1800 to the Present
4 credit(s);
Instructor: Ye,Twiggy Shana
Description: What is the relation between queer theory and queer cinema? What does it mean to queer cinema? and How? This course offers an introduction to contemporary queer cinemas, focusing on several key genres, directors and themes in transnational queer film cultures and scholarship. We will explore how media representations and imaging technologies construct notions of the body, identity and subjectivity in relation to sexuality, gender, race, class and nation-state by bringing in various films, directors, genres and narratives that often cut across borders of various kind as they negotiate such crossings. Topics of the course will include: New queer cinema, queer (in)visibility, identity politics, transgender cinema, the queerness of vampire and children, queer eco-criticism, colonialism and orientalism, neoliberalism, citizenship and state violence, queer diasporic cinema, techo-queer utopias, and so on. We will learn to use feminist and queer critiques to analyze and challenge hegemonic and dominant ideologies and representations in cinema by exploring issues including: the male/straight gaze, queer viewership and spectacle, concepts of difference, intersectionality, queer pop culture, queer camp, affect and so on. Instead of focusing solely on queer directors and films about and for queers, we will develop the analytic tool for queer reading and viewing. Instead of viewing GLBT and queer as preexisting categories of identity, we will discuss how queer subjects are formed and negotiated through interpretation and viewing practices. Although this course is not an introduction to film studies, we will review basic concepts such as editing, cinematography, shots, mise-en-scene, film history, and etc. Film list (subject to change) Milk, Brokeback Mountain,
GLBT 3404 Transnational Sexualities
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3404;
Instructor: Kumar, Elakshi
Description: This class will use literary and academic texts, creative non-fiction and first person essays, as well as film and digital media to examine the ways in which ideas about non-normative sexualities move across geographic boundaries and what social movements that take up these issues look like, particularly in communities of color and the global South. This course will consider the uses and limits of using categories such as ?LGBT? and ?queer? in non-western contexts and will interrogate western frames of understanding sexuality and rights as being the default model for other contexts of struggle. This course also presumes that it is impossible to look at sexuality without understanding and exploring how it is always constructed in and through discourses of race, gender, class and nation. Therefore, we will spend some time collecting a variety of theoretical tools?from gay and lesbian studies, queer theory, third world and transnational feminisms, and postcolonial studies?that will help us look at ?transnational sexualities? in a critical manner. Throughout the course, we will examine the production of gendered, raced, and classed bodies and explore the significance of transnational analysis of sexuality to social justice.
Style: 60% Lecture, 10% Film/Video, 15% Discussion, 10% Small Group Activities, 5% Guest Speakers.

GLBT 3456W Sexuality and Culture
3 credit(s); 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.

GLBT 4101 Gender, Sexuality, and Politics in America
3 credit(s);
Instructor: Butler PhD, Pamela Wynne
Description: Student may contact the instructor or department for information.

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: STAFF
Description: How do women writers of color from the Americas and the Caribbean articulate their lives and experiences as post-colonial subjects? What do their writings reveal about the politics of memory, history, and voice in the shadow of empire? How do we understand these poetics to be constitutive of the specific locatedness of post-colonial experiences and the contingent materiality of race, class, sex, and gender? How do these authors imagine alternate possibilities? These questions form the point of departure for the semester. Through an exploration of narrative non-fiction, poetry, plays, short stories, and novels, we will examine how authors envisage their relationship to body, place, time, and nation. In particular, we will read almost exclusively from ?fabulist genres.? Fabulist writing encompasses work loosely categorized as magical realism, science fiction, myth, fable, folk lore, fantasy, horror, and cyberpunk. Such texts are often marked by ?unrealistic?/?non-realistic? settings, plots, and characters but are nevertheless committed to ?real? sociopolitical critique. Together we will think about why and how given authors employ fabulism as a metaphor for ?other(ed) worldliness? through a broader commitment to social justice. Reading load: moderate. Writing: one research paper; three informal responses; one short book review. No exams!

GWSS 1004 Screening Sex: Visual and Popular Culture
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: This is an introductory critical media literary course that approaches media analysis using feminist critique. The field of feminist media studies pays close attention to the ways that gender, race and sexuality are employed in popular culture and media throughout history to develop and reaffirm particular popular understandings of representation, group identification, subjectivity and citizenship. In addition, to analyzing the structure and politics of mainstream media representations this course will expose its students to forms of media that were produced in resistance to and outside of mainstream culture, to illustrate the possibilities and limitations of more socially conscious representations. We will explore
the following major concepts: popular culture, spectatorship, technology, feminist critique, genre, the gaze and new media. Students will gain the skills needed to analyze and critique various forms of popular media to then engage in more rigorous and complex media analyses at a higher level.

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

GWSS 1905 Freshman Seminar: Black Looks: Race, Gender and Representation
A-F only, 3 credit(s), max credits 6;
Instructor: Isoke, Zenzele
Description: In this course, we will critically explore the writing of bell hooks, one of the foremost and most prolific feminist thinkers alive today. Throughout the course, will closely explore the most popular and transformative writings she has produced. We will begin with her earliest writings that exposed the inherent racism of white middle class feminism and its institutionalization in predominantly white university settings. We will go on to examine her autobiographic writings that illuminate her own unique ways of theorizing the intersections between place, identity, and black subjectivity. We will study and debate her incisive critiques of racist-sexist portrayals of blackness in American popular culture including film, television, and literature. This is a foundational course in contemporary feminist theory that introduces core GWSS themes in a provocative, compelling, and exciting way for freshman at the University of Minnesota. Students will learn how to effectively critique representations of femininity and masculinity in popular culture. As such digital media (including films clips, and videos) will be fully incorporated into the course content. Students will learn to critically analyze media representations of blackness with attention paid to the power of the gaze, and the ideological filters that we use to see and interpret cultural artifacts and montages that are used by the media to elicit our attention. Pedagogical Approach: Education as the Practice of Freedom This course will be taught using a hooksian pedagogical approach. This means that the class will be considered a space in which all can practice freedom. Freedom in this sense means being achieving a level of consciousness that is not confined to Eurocentric teaching practices that rely on technologies of domination that have roots in white supremacist, patriarchal, and capitalist thinking. In a basic way, students will be asked to join a learning community that is honest, hopeful, and visionary. We will confront the horrors and difficulties of the past, present, and future toward the aim of creating a more holistic, hopeful, and peaceful understanding and practice of human life. As a result, the cornerstone of this course will be a group film analysis of a film that centers black female protagonists. Over the semester, students will be evaluated upon how they are able to transform their thinking by reading, talking about, critiquing, and building from the ideas of bell hooks. Though the instructor will serve as chief facilitator, this role will be shared, enabling students to experience the power of directing and mediating the discussion. Students will be encouraged to speak and respond to each other rather than speaking and responding to the instructor.

GWSS 3002V Honors: Gender, Race and Class in the U.S.
A-F only, 3 credit(s); Honors credit will not be granted if credit already received for: 3002H; Credit will not be granted if credit has been received for: GWSS 3002W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Barak Obama is President. Lady Gaga and Nicki Minaj are reimagining femininity. The Great Recession has us all pinching our pennies even tighter. And gay people are getting married all over the place! The words are used often, but what do we really mean when we talk about gender? race? and class? More specifically, how do race, class, and gender shape our lives in the U.S. today? In what ways do these markers of difference intersect with sexuality, able-bodiedness and citizenship? Are things changing? Are we post race?? Do we really mean what we say when we recite the American creed that all [people] are created equal?? These beginning questions will guide our exploration into the socially constructed, historically contingent categories that continue to wield considerable power over a person?s life chances in the contemporary U.S. Throughout the semester we will work to critically examine the systems of inequality, oppression, power, and privilege that structure our lives. This will include (but is not limited to) exploring a brief history of race relations in the U.S.; the social construction of gender; the sociocultural effects and psychologies of class; state-sanctioned and institutionalized violence; and contemporary debates around identity politics. To do this, we?ll use literary, historical, economic and sociological perspectives to examine the ever-shifting relationship between personal experience and larger social institutions, ideologies, and policies. While various feminist and interdisciplinary theories will guide the course, our use of critical theory will be paired with personal narratives. In doing so, we will work to give voice to the material effects and everyday experiences of racism, classism, ethnocentrism, (cis)sexism, heterosexism, and ableism, among many forms of oppression. By gaining a better understanding of, and locating ourselves within, the systems of power and knowledge that construct and constrain our society we?ll begin the work needed to envision strategies of resistance and empowerment that promote broader social justice. Rather than teaching you what to think, this course to teach you how to think critically about race, class, gender, sexuality, ability and citizenship by shifting between numerous feminist perspectives, engaging in dialogue, and learning to write and rewrite as a means of intellectual discovery and knowledge production.
GWSS 3002W Gender, Race, and Class in the U.S.
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3002V; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Barak Obama is President. Lady Gaga and Nicki Minaj are reimagining femininity. The ?Great Recession? has us all pinching our pennies even tighter. And gay people are getting married all over the place! The words are used often, but what do we really mean when we talk about ?gender? ?race? and ?class?? More specifically, how do race, class, and gender shape our lives in the U.S. today? In what ways do these markers of difference intersect with sexuality, able-bodiedness and citizenship? Are things changing? Are we ?post race?? Do we really mean what we say when we recite the American creed that ?all [people] are created equal?? These beginning questions will guide our exploration into the socially constructed, historically contingent categories that continue to wield considerable power over a person?s life chances in the contemporary U.S. Throughout the semester we will work to critically examine the systems of inequality, oppression, power, and privilege that structure our lives. This will include (but is not limited to) exploring a brief history of race relations in the U.S.; the social construction of gender; the sociocultural effects and psychologies of class; state-sanctioned and institutionalized violence; and contemporary debates around identity politics. To do this, we?ll use literary, historical, economic and sociological perspectives to examine the ever-shifting relationship between personal experience and larger social institutions, ideologies, and policies. While various feminist and interdisciplinary theories will guide the course, our use of critical theory will be paired with personal narratives. In doing so, we will work to give voice to the material effects and everyday experiences of racism, classism, ethnocentrism, (cis)sexism, heterosexism, and ableism, among many forms of oppression. By gaining a better understanding of, and locating ourselves within, the systems of power and knowledge that construct and constrain our society we?ll begin the work needed to envision strategies of resistance and empowerment that promote broader social justice. Rather than teaching you what to think, this course teaches you how to think critically about race, class, gender, sexuality, ability and citizenship by shifting between numerous feminist perspectives, engaging in dialogue, and learning to write and rewrite as a means of intellectual discovery and knowledge production.

GWSS 3002W Gender, Race, and Class in the U.S.
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3002V; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Writing Intensive
Instructor: Carter, Angela
Description: Barak Obama is President. Lady Gaga and Nicki Minaj are reimagining femininity. The ?Great Recession? has us all pinching our pennies even tighter. And gay people are getting married all over the place! The words are used often, but what do we really mean when we talk about ?gender? ?race? and ?class?? More specifically, how do race, class, and gender shape our lives in the U.S. today? In what ways do these markers of difference intersect with sexuality, able-bodiedness and citizenship? Are things changing? Are we ?post race?? Do we really mean what we say when we recite the American creed that ?all [people] are created equal?? These beginning questions will guide our exploration into the socially constructed, historically contingent categories that continue to wield considerable power over a person?s life chances in the contemporary U.S. Throughout the semester we will work to critically examine the systems of inequality, oppression, power, and privilege that structure our lives. This will include (but is not limited to) exploring a brief history of race relations in the U.S.; the social construction of gender; the sociocultural effects and psychologies of class; state-sanctioned and institutionalized violence; and contemporary debates around identity politics. To do this, we?ll use literary, historical, economic and sociological perspectives to examine the ever-shifting relationship between personal experience and larger social institutions, ideologies, and policies. While various feminist and interdisciplinary theories will guide the course, our use of critical theory will be paired with personal narratives. In doing so, we will work to give voice to the material effects and everyday experiences of racism, classism, ethnocentrism, (cis)sexism, heterosexism, and ableism, among many forms of oppression. By gaining a better understanding of, and locating ourselves within, the systems of power and knowledge that construct and constrain our society we?ll begin the work needed to envision strategies of resistance and empowerment that promote broader social justice. Rather than teaching you what to think, this course teaches you how to think critically about race, class, gender, sexuality, ability and citizenship by shifting between numerous feminist perspectives, engaging in dialogue, and learning to write and rewrite as a means of intellectual discovery and knowledge production.

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: STAFF
Description: What is theory? What is feminist theory? What does theory tell us about the world and our place in it? How do our experiences of race, class, gender, and sexuality create the possibility of theorizing difference and power? How have various feminist theories challenged some forms of oppression and yet been complicit with others? Feminist Thought and Theory is an intermediate level exploration of the major theoretical trends, debates, and politics of contemporary feminist analysis and critique. The course will address the historical role and continued relevance of feminist theory by tracking debates within the field and by applying "feminist thinking" to today?s political and cultural conflicts. The course is fundamentally intersectional and interdisciplinary: It is intersectional in that it considers sex, gender, race, class, sexuality, nationality, ability, and other differences as deeply entwined with one another and central to both culture and politics. It
interdisciplinary in that it draws from multiple fields of study, including philosophy, ethnic studies, literature, political theory, law, history, sociology, and others. The course will work through feminist thought about epistemology/knowledge production, the role of experience in theory, identity politics, law and criminality, contemporary imperialism, corporeality, queer/trans/feminist debates, and feminist political agency. In doing so, the course will be a gateway for students interested in women's and gender studies, LGBT and queer studies, sexuality, cultural studies, and social justice struggles. As a Writing Intensive course, Feminist Thought and Theory requires a semester-long major writing project that is distinct from other class assignments and that has a scheduled revision process. This major writing project is heavily weighted in students' final grades and is required to pass the course. In addition to the major writing project, the course requires weekly responses to study guide questions and a group project that examines in depth one of the weekly themes and guides class discussion of that theme. Student participation in class discussions is essential to success in this course, as is a willingness to read and grapple with theoretical writing.

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 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 ideal of womanhood? With a focus on complexities of women's roles, we examine the way women writers have used various genres of literature to articulate personal and social struggles. Through an in-depth study of fiction, poetry, and drama, as well as critical non-fiction texts, we will engage with the question of fidelity and betrayal within relationships and societal perceptions. What images of femininity do these writers convey? How do formal and stylistic devices transform meaning?

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
GWSS 3306 Pop Culture Women
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Garvey, Michelle Jenneman
Description: Often eschewed as being dumbed-down and trivial, this course takes popular culture seriously for its powerful effects on our lives. Social norms are mainstreamed as never before in this globalized, digital, and corporate era, as we become increasingly inundated with, and immersed in, advertising, modes of surveillance, round the clock news, and entertainment. And yet individuals and communities also have varying degrees of power to shape, reform, and even transform what?S ?popular.? This course will examine the relationship between culture and power via popular representations of women. It will ask what popular discourse on gender, race, sexuality, ability, sex, class, species, nation, etc. can teach us about what it means ?to [not] be? and ?to [not] become? a woman. It will ask who controls mass media, to what effect?and on whom? In what ways are we complicit in pop culture, and in what ways?and for what reasons, in which circumstances?might we resist it?if it can, indeed, be resisted? This course approaches our inquiries in three uneven sections: the first seven weeks of class will be spent investigating the field of cultural critique, in order to ascertain the theoretical tools we need to become critical participants in pop culture. The second six weeks of class takes up hegemonic tropes about women, femaleness, femininity, and feminism. The third, brief section of our course is devoted to your final presentations. By the end of our semester, I hope course material and discussion will pique your curiosity about pop culture, and engender new pathways of cultural critique, participation, and transformation. GWSS 3306 satisfies two CLE requirements: Arts and Humanities Core Course and Diversity and Social Justice in the U.S. Theme Course. In addition to articles that can be located on our Moodle site, one book is required: Zeisler & Jervis, eds. Bitchfest: Ten Years of Cultural

GWSS 3305 Queer Cinema
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: What is the relation between queer theory and queer cinema? What does it mean to queer cinema? and How? This course offers an introduction to contemporary queer cinemas, focusing on several key genres, directors and themes in transnational queer film cultures and scholarship. We will explore how media representations and imaging technologies construct notions of the body, identity and subjectivity in relation to sexuality, gender, race, class and nation-state by bringing in various films, directors, genres and narratives that often cut across borders of various kind as they negotiate such crossings. Topics of the course will include: New queer cinema, queer (in)visibility, identity politics, transgender cinema, the queerness of vampire and children, queer eco-criticism, colonialism and orientalism, neoliberalism, citizenship and state violence, queer diasporic cinema, techo-queer utopias, and so on. We will learn to use feminist and queer critiques to analyze and challenge hegemonic and dominant ideologies and representations in cinema by exploring issues including: the male/straight gaze, queer viewership and spectacle, concepts of difference, intersectionality, queer pop culture, queer camp, afffect and so on. Instead of focusing solely on queer directors and films about and for queers, we will develop the analytic tool for queer reading and viewing. Instead of viewing GLBT and queer as preexisting categories of identity, we will discuss how queer subjects are formed and negotiated through interpretation and viewing practices. Although this course is not an introduction to film studies, we will review basic concepts such as editing, cinematography, shots, mise-en-scene, film history, and etc. Film list (subject to change) Milk, Brokeback Mountain, Velvet Goldmine, Safe, Set it off, Paris is Burning, Bound, Boys Don't Cry, Wild Side, Fire, Happy Together, Lan Yu, Bad Education, Let the Right One in, The Girl with the Dragon Tattoo, Thelma and Louise, etc.

GWSS 3303W Writing Differences: Literature by U.S. Women of Color
3 credit(s); Credit will not be granted if credit has been received for: AAS 3303W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Desai, Jigna
Description: Dragon Ladies, Lotus Blossoms, and Tiger Moms are some of the ways that Asian American women are understood and framed within dominant American culture. This semester, this course will focus on writings by Asian American women. This is in an exciting moment when writings by Asian American women are widely published and acknowledged as new, significant voices that explore intersections of language, cultural and national identities, race, gender, sexuality, and class in American discourse. This course will introduce students to a wide range of texts by Asian American women writers. Through these creative expressions, we will examine the histories, cultures, languages, and identities of Asian American women looking at questions of war, empire, migration, family, labor, community, their representations of migration, family, work, and community. We will think about how the aesthetic form is used, mobilized, and transformed in order to tell stories about Asian America. Texts include: The Woman Warrior, Interpreter of Maladies, The Temperature of this Water, and Migritude
GWSS 3390 Topics: Visual, Cultural, and Literary Studies: Novels and Nations
3 credit(s), max credits 6;
Instructor: Kaminsky, Amy K
Description: One of the ways nations constitute themselves is through narratives, including fictional narratives, that shape national consciousness. Nevertheless, the dominant narratives of nation often fit badly with the realities of marginalized groups. In this class we look at the ways historically marginalized groups including women, ethnic minorities, political dissidents, exiles, and sexual minorities both participate in and disrupt the dominant narratives of nation. The literary texts are all taken from the Southern Cone of Latin America: Argentina, Chile, and Uruguay. This regional focus will allow us to locate these texts in a concrete and specific location, fostering a deeper understanding of a specific world region. The course is also designed to familiarize students with the conventions and inner workings of literary texts. The British novelist and essayist 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. A major goal of the course is to give interdisciplinary students in GWSS and 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. These are approximate percentages.
Grading: 55% reports/papers, 45% reflection paper. The term "reflection papers" here refers to the 9 responses to the readings, worth 5% each. Attendance and participation in discussions are obligatory, though no formal grade will be given for them.
Exam Format: No exams

GWSS 3404 Transnational Sexualities
3 credit(s); Credit will not be granted if credit has been received for: GLBT 3404; Meets CLE req of Global Perspectives
Instructor: STAFF
Description: This class will use literary and academic texts, creative non-fiction and first person essays, as well as film and digital media to examine the ways in which ideas about non-normative sexualities move across geographic boundaries and what social movements that take up these issues look like, particularly in communities of color and the global South. This course will consider the uses and limits of using categories such as ?LGBT? and ?queer? in non-western contexts and will interrogate western frames of understanding sexuality and rights as being the default model for other contexts of struggle. This course also presumes that it is impossible to look at sexuality without understanding and exploring how it is always constructed in and through discourses of race, gender, class and nation. Therefore, we will spend some time collecting a variety of theoretical tools?from gay and lesbian studies, queer theory, third world and transnational feminisms, and postcolonial studies?that will help us look at ?transnational sexualities? in a critical manner. Throughout the course, we will examine the production of gendered, raced, and classed bodies and explore the significance of transnational analysis of sexuality to social justice.

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 3410 La Chicana
3 credit(s);
Instructor: STAFF
Description: This class centers on Chicanas or politically defined women of the Mexican American community. Our
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 Seabold'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, 65% Discussion, 20% Small Group Activities, 5% Field Trips, 5% Guest Speakers.
Grading: 20% mid exam, 30% final exam, 5% reports/papers, 10% quizzes, 25% additional semester exams, 10% class participation. Three exams are essay take-home exams: 20%, 25%, and 30%.

GWSS 3490 Topics: Political Economy and Global Studies: Indian Feminisms in a Global Context
3 credit(s), max credits 6;
Instructor: Sawhney, Simona
Description: A series of rape cases in India in 2012-13 drew widespread public and media attention. In the protests and debates that followed, it became clear that though everyone wanted "justice," there were several disagreements about what "justice" might entail. At stake were not only questions of sexuality, marriage, and foundational ideas about gendered identity, but also questions concerning caste and class, the death penalty, the privilege of the armed forces, the language of the law, and the powers of the police. In this course, we will study some of the arguments that have unfolded in recent months in the context of the history of the feminist movement in India. Readings and films will focus on several issues including the state's response to violence against women, debates about abortion, the political emergence of a gay rights discourse, and the varied anxieties provoked by the sale of sexual pleasure. We will study these issues in relation to comparable debates in the US and in Europe. Through the course of the semester, we will aim to build a more nuanced and critical approach to gender itself, as it is articulated and acted in everyday life as well as in activist and theoretical discourse.

GWSS 4303W Writing Differences: Literature by U.S. Women of Color
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Desai, Jigna
Description: Dragon Ladies, Lotus Blossoms, and Tiger Moms are some of the ways that Asian American women are understood and framed within dominant American culture. This semester, this course will focus on writings by Asian American women. This is in an exciting moment when writings by Asian American women are widely published and acknowledged as new, significant voices that explore intersections of language, cultural and national identities, race, gender, sexuality, and class in American discourse. This course will introduce students to a wide range of texts by Asian American women writers. Through these creative expressions, we will examine the histories, cultures, languages, and identities of Asian American women looking at questions of war, empire, migration, family, labor, community, their representations of migration, family, work, and community. We will think about how the aesthetic form is used, mobilized, and transformed in order to tell stories about Asian America. Texts include: The Woman Warrior, Interpreter of Maladies, The Temperature of this Water, and Migritude

GWSS 8103 Feminist Theories of Knowledge
3 credit(s);
Instructor: Scheman, Naomi
Description: A unique opportunity, funded by the Imagine Chair, the seminar includes meetings with national & local experts in epistemology, food systems, & community-based participatory research, as well as optional expense-paid conference travel & e-publishing opportunities. Epistemology as currently understood has roots in 17thC European social, political, & economic crafting of the bourgeois individual. Today epistemology has lost touch with those roots & approaches its problems as timeless & universal. We will ask: What epistemological problems arise in the context of today's world?
Feminist (and other liberatory) epistemology thus differs from the mainstream less in answers than in questions. One set of questions starts with our pervasive, irremediable dependence on others for most of what we need to know, much of it embedded in institutions (like universities) that create, certify, and monitor expertise. Their trustworthiness has as much to do with social justice as with scientific method. This shift in the nature of epistemology is controversial, and students can enter into the debates through the on-line Social Epistemology Review & Reply Collective. We will explore the idea of sustainable epistemology: modes and norms of inquiry that make it more likely that those who are less privileged and more vulnerable will be able to pursue knowledge of the world. Particular focus will be on relationships between university-based disciplinary expertise and other ways of knowing and communities of knowers. Guests at the seminar are involved in modes of inquiry attentive to such relationships. Students will make connections with their own work, both as they are being socialized as academic researchers and as they relate to various individuals and groups that are among or that also interact with their objects of study. A major focus will be on the ethics and politics of inquiry: To whom ought we to be accountable as scholars and researchers? What is involved in being trustworthy, especially when exercising disciplinary expertise? We will address the importance of place, of being at this university, in this place, in relation to diverse communities that surround the U. Texts include Jose Medina, Epistemology of Resistance; Race & Epistemologies of Ignorance, ed. S. Sullivan & N. Tuana; and Miranda Fricker, Epistemic Injustice. Prof. Medina (Vanderbilt Univ.) will visit and meet with our seminar. Students are invited (expenses covered) to the Nibi-Manoomin Bridging World Views Symposium at the Grand Casino, Mille Lacs & to meet with Kyle Powys Whyte (Citizen Potawatomi Nation, Michigan State Univ.). We will meet with Alison Wylie (Univ. of Washington), here for a symposium, ?Resilience & Sustainability: Learning from the Maya & Other Ancient Cultures??, to which students are invited. Other guests will be from the Twin Cities and include people involved in community-based participatory research and other modes of engaging university expertise with other ways of knowing.

**GWSS 8108 Genealogies of Feminist Theory**
3 credit(s);
Instructor: Zita, Jacquelyn N
Description: Debates in gender theory; intersections of gender theory with critical race theory, post-colonial theory, sexuality theory, social class analysis. Inter-/multi-disciplinary feminist research methodologies from humanities/social sciences.

**GWSS 8220 Seminar: Science, Technology & Environmental Justice: Gender and the Politics of Health**
3 credit(s), max credits 6;
Instructor: DeBruin PhD, Debra Ann
Description: This course explores the moral and political importance of gender in topics related to health. These issues are situated within their institutional and broader social contexts. This course is appropriate for a wide audience including students from the health professions, philosophy, social science, and law. Meets with BTHX 8510 and GWSS 8220

**GWSS 8260 Seminar: Race, Representation and Resistance**
3 credit(s), max credits 6;
Instructor: Isoke, Zenzele
Description: In this course we will examine the multiple ways that black women writers, scholars, activists, and playwrights have theorized space, spatiality, and resistance. We will explore how diverse women of African descent have constructed and reimagined space and identity in the context of survival in different parts of the world. One key theme that will be explored is how blackness as both a resistant discourse and a performative identity has shaped black women's engagements with social movements, public art and theatre. Black women's place-making efforts will be considered as well as their efforts to reimagine community through multiple forms of political agency. This course offers a provocative combination of contemporary black feminist ethnography, critical biographies, cultural and literary criticism, and plays. We will examine the intersections between black queer studies and black feminism, while emphasizing radical re-thinkings of identity, sexual agency, and resistance. We will learn to critically assess the new epistemological and methodological approaches that black women have developed, paying close attention to how the workings of time, space, and place have factored into the writing and theorizing of new classic, yet understudied texts. We will explore new writings in black feminist internationalism and black feminist post-colonialism, as well as new histories that have been written about black women's experiences in the U.S. during the Cold War period, the Civil Rights Movement, and contemporary urban social movements. Reading List: Demonic Grounds: Black Women and the Cartographies of Struggle (2006) by Katherine McKittrick; Nervous Conditions (1988) by Tsitsi Dangarembga; Left of Karl Marx: The Political Life of Black Communist Claudia Jones (2007) by Carole Boyce Davies; Radicalism at the Crossroads: African American Women Activists in the Cold War (2011) by Dayo Gore; Pedagogies of Crossing (2006) by M. Jacqui Alexander; Muslim Girls and the Other France (2006) by Trica Keaton; Aberrations in Black: Toward a Queer of Color Critique (2003) by Roderick Ferguson; Red Letter Plays (2001) by Suzi Lori Parks; Essays by Mae Henderson; Essays by Evelyn Hammonds; Eslanda Robeson; Large and Unconventional Life of Mrs. Paul Robeson (2013) by Barbara Ransby; Thieving Sugar: Eroticism Between Women in Caribbean Literature by Omise’ekte Natasha Tinsley (2010); Les Blancs: The Last Collected Plays of Lorraine Hansberry (1972); The Dark End of the Street: Black Women, Rape and Resistance?A New History of the Civil Rights Movement (2010) by Danielle McGuire Assata: An Autobiography by Assata Shakur (1987); Urban Black Women and the Politics of Resistance (2013) by Zenzele Isoke. Our Sister Killjoy (1997) by Ama Ata Aidoo. A Culture of Place (2009) by bell hooks.
GWSS 8996 Feminist Studies Colloquium
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Scheman, Naomi
Description: Feminist Studies colloquium series

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%
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.

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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: Lehman, Clarence L
Description: Student may contact the instructor or department for information.

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

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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.

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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.

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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: Starr, Tim
Description: Student may contact the instructor or department for information.

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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.

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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.

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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.

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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.

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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: Brooker, Robert James
Description: Student may contact the instructor or department for information.
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.

Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Juhn, Steven Sung-Kyun
Description: Student may contact the instructor or department for information.

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.

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.

Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Verneris, Michael Richard
Description: Student may contact the instructor or department for information.

Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Koyano PhD, Naoko
Description: Student may contact the instructor or department for information.

Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Asakura PhD, Atsushi
Description: Student may contact the instructor or department for information.

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.

Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Kyba, 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: Metzger, Joseph Mark
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: Carroll, Marilyn 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: 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: Springer, Nathan 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: Ostrander PhD, Julie Hanson
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: O’Connor PhD, Michael B
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: Simone, Donald 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: 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: 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: Hays, Tom S
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: Brooker, Robert James
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: Rougvie, Ann E
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: Zierhut, Heather
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: Farrar, Michael Archibald
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: Clarke, Duncan John
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: Schleiss, Mark Richard
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: 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: 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: Marahrens,York H
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: Subramanian PhD, Subree
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, Yasuhioko
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: Sobeck, Alexandra
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 5036 Molecular Cell Biology
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

GCD 6110 Science of Medical Practice
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 equivalent 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: Titus, Margaret A.
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
A-F only, 2 credit(s);
 Instructor: Zierhut, Heather
 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 8993 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
 Instructor: Knoblauch, Sue
 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: Bower, Matt
 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 allows students in the Master of Geographic Information Science program to earn internship credits toward their degree program. The objective is to gain practical hands-on GIS experience while solving problems in a real-world work environment. Students earn credits by working with a MGIS faculty sponsor as well as a site supervisor.
 Style: Primarily on-site work with some time spent during the term meeting with faculty sponsor.
 Grading: Grading is determined by completing a GIS 5530 contract agreement with the MGIS faculty sponsor.

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 Introduction to Digital Mapping: ArcGIS Basics
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 Web GIS and Services
3 credit(s);
 Instructor: Fischer, Brian Charles
 Description: GIS 5574 is an 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 GIS Project Management and Professional Development**

A-F only, 3 credit(s);
Instructor: Kne, Len

**Description:** This is a required graduate-level seminar for all students who are entering the MGIS program. The course focuses 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, and degree program planning. The second portion of the course introduces aspects of GIS project management through lectures, 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.

**Grading:** 85% special projects, 15% class participation.

**GIS 8501 GIS Project Management and Professional Development**

A-F only, 3 credit(s);
Instructor: McMaster, Susanna Akiko

**Description:** This is a required graduate-level seminar for all students who are entering the MGIS program. The course focuses 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, and degree program planning. The second portion of the course introduces aspects of GIS project management through lectures, 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.

**Grading:** 85% special projects, 15% class participation.

**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: Kne, Len

**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.
**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: STAFF
Description: It is common today to talk about living in a global world and for much of our lives the world has been nothing but a global world. Why then a course on globalization? First, it is important to think about the forces that have come to shape other world we live in. We need to ask why is the world economy organized the way it is? How is our security tied into the development of global geopolitics? Is global culture wiping away the differences between places? Second, we need to look at how globalization continues to shape the world we live in. Global connections between places are constantly changing. The forces of globalization continue to have an impact on our lives and our livelihoods; they continue to shape the lives and livelihoods of others. The possibilities that people in different parts of the world and of different situations have for a good life is very much tied to the nature, the density and the profound unevenness of global connections. Geography is a discipline particularly suited for the study of globalization because of its focus on the spatial dimensions of globalization. Attending to this dimension gives the geographer a unique ability to understand the connections and differences between places, the way that these geographical relations shape our experience of the world, and what it means to live in a world in which our everyday lives are lived amid relations that stretch around the globe. Geography involves more than asking ‘where?’, it also involves asking how and why places are like they are, and seeks to understand the geographical processes and relations that made them that way. It involves understanding the world ‘in the making’. Not just a ‘global’ world, but a world that is dynamic and continuously changing. Not just a world of differences, but a world in which differentiation is continuously occurring: a globalizing world.

**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: STAFF
Description: Course Instructor: Laura Cesafsky Humans are now an urban species, and this is no small thing. Modern urbanization marches on, a whirlwind transformation of social organization that is implicated in some of the most intractable problems of contemporary life?the tremendous socioeconomic inequality at all scales and the prolific degradation of the natural world, to be sure. ?Global Cities? is a big topic, and in this class we will anchor ourselves in analyses of built environments in real cities across the globe. In so doing, we will develop a vocabulary for thinking politically about the ?stuff? of the city?its forms, natures, neighborhoods, buildings, and conduits. By looking comparatively at cities? differential physical characteristics, especially along the troubled axis of ?developed? Global North and ?developing? Global South, we will learn how the urban environments reflect and reproduce broader social processes: capitalism, racism, homophobia, and colonialism. On a more positive note, we discuss the cultural and political renaissance urban life is currently enjoying. In light of the Arab Spring and other recent city-centered democratic upheavals, there is a renewed sense today that the spaces and networks of the city are crucial to any project of egalitarian political transformation. What is more, while cities were long seen as unmitigated ecological and social disasters, global urbanization is increasingly imagined as engendering solutions to some of the very same problems it creates. The trick, of course, will be to design our urban environments better. So we will look critically at how cities from Medellin to Detroit have been shaped into ?laboratories? for the testing of the social and environmental capacities of new urban objects and forms.
Grading: 2 exams 5 reaction papers 1 Map Quiz 1 special project 2 Fieldwork essays 1 Research Paper

**Geog 1403 Biogeography of the Global Garden**
4 credit(s); Meets CLE req of Biological Sciences; meets CLE req of Environment
Instructor: STAFF
Description: The trees, birds, grasses, fishes, mammals, and smaller organisms of the Earth are distributed in striking geographical patterns. These spatial and temporal differences in the types and diversity of organisms are the result of geographic processes of dispersal as well as the processes of evolution, adaptation, and extinction. Students will explore: (1) how the biological components of global environments create geographically and temporally varied resource patterns; (2) how the connections between the biotic and abiotic components of environmental systems interrelate; (3) how humans and natural processes bring about changes to the physical environment; (4) how to use simple experiments and models to examine biogeographical patterns, and to evaluate the results; and (5) how to describe and explain the role and place of science and scientific methods in modern society. In the laboratory, students will make observations, and use maps and simple simulation models to evaluate the sensitivity of organisms to environmental variables. Students will learn: (1) how the outcomes from the interactions of organisms with their environment vary geographically, and (2) why the outcomes frequently fail to support commonly held assumptions about the climatic controls on biotic distributions.
Style: 60% Lecture, 40% Laboratory.
Grading: 60% quizzes, 40% other evaluation.
Exam Format: mostly objective and short essay
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: STAFF
Description: INSTRUCTOR: Visiting Professor Kenny Blumenfeld This course will introduce students to the fundamentals of weather and climate, including: the earth-sun relationship, seasons, atmospheric processes, weather maps, extreme/hazardous weather, and climate change. Lab sections will be somewhat applied, hands-on, and will utilize the outdoors regularly. The class fulfills requirements as a 4-credit, General Physical Sciences/Lab course, and satisfies the Liberal Education ?Environment? theme. INSTRUCTOR: Visiting Professor Kenny Blumenfeld
Style: 60% Lecture, 10% Film/Video, 30% Laboratory.
Grading: 30% mid exam, 25% final exam, 45% laboratory evaluation. Grading: mid-term 1: 15%, mid-term 2: 15%, Final: 25%, lab assignments: 45%

Geog 1502 Mapping Our World
3 credit(s); Meets CLE req of Social Sciences; meets CLE req of Technology and Society
Instructor: STAFF
Description: INSTRUCTOR: PROFESSOR STEVE MANSON 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. This class fulfills TWO LE requirements, the Social Sciences Core and the Society and Technology Theme.
Style: 30% Lecture, 20% Discussion, 20% Small Group Activities, 30% Web Based.
Grading: 15% mid exam, 15% final exam, 15% special projects, 10% class participation, 45% laboratory evaluation.
Exam Format: Exam Format: Exams are multiple choice and offered during the semester (in other words, no final exam). The two-page lab project is done in the final weeks of the course.

Geog 1905 Freshman Seminar: Social Justice and the City
3 credit(s);
Instructor: Derickson, Kate Driscoll
Description: Student may contact the instructor or department for information.

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: Why do we have two cities here? Explore, discuss and learn about this Twin Cities region.... 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 and what inequities can we observe? -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, and videos) will be used extensively. Field studies make up the bulk of the course - 60% of grade. You will get to know Minneapolis and St Paul in unique ways. All readings available on the Moodle site. Mid-term is short answer and map test, Final is cumulative and short answer and essay. Test study guide are given out. Some assignments differ for the 1973 level. In all assignments those registered in 3973 are expected to perform at a much higher level of analysis, and this will be reflected in the final grading curve.
Style: 75% Lecture, 10% Film/Video, 10% Discussion, 5% Small Group Activities.
Grading: 20% mid exam, 25% final exam, 50% reports/papers, 5% attendance.

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: STAFF
Description: The ideal strategy for learning about the geography of the United States and Canada would be to hire a helicopter and fly all over both countries. That strategy patently is impractical, so I have done the hard work for you. Over the years I have traveled to all parts of these countries and taken color slides, which are my class lecture notes. In each class I share with you my slides, observations, and experiences in different regions. I wish I could go back to each area each year, but that is impossible, so some of my slides cannot be quite as recent as I might like. 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.

Geog 3161 Europe: A Geographic Perspective
3 Geog 3371W Cities, Citizens, and Communities
4 credit(s); Credit will not be granted if credit has been received for: GLOS 3921;
Instructor: Munoz, Lorena
Description: In this course students will understand, explore, analyze, write and experience how urban spaces are produced through the interactions of different social groups that come together in various urban spaces within a city. Students will understand, how urban spaces (cities) in the United States are created, (re)created and experienced in everyday life through different social group interactions. Students will explore how intersections of race, class, gender and sexuality help create diverse and often contested areas/neighborhoods within and among cities. Through theoretical, historical and contemporary perspectives of urban space, students will analyze and write about the production of cultural 

60% Lecture, 40% Laboratory.

3 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 paperclips) 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 dis-incentives, 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.

2 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

4 Geog 3361W Cities, Citizens, and Communities
4 credit(s); Credit will not be granted if credit has been received for: GLOS 3921;
Instructor: Munoz, Lorena
Description: In this course students will understand, explore, analyze, write and experience how urban spaces are produced through the interactions of different social groups that come together in various urban spaces within a city. Students will understand, how urban spaces (cities) in the United States are created, (re)created and experienced in everyday life through different social group interactions. Students will explore how intersections of race, class, gender and sexuality help create diverse and often contested areas/neighborhoods within and among cities. Through theoretical, historical and contemporary perspectives of urban space, students will analyze and write about the production of cultural

70% Lecture, 15% Discussion. Audio-visual media (film and documentary clips)
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 take place and the importance of the nature of interactions between different parts of the world.

Geog 3373 Changing Form of the City

3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Pentel, Paula R
Description: This course introduces you to the relationship between past urban environments and the cultures that produced them. Cities, seen within the broad trajectory of human history, are a very recent phenomenon, but they are now where most of the earth's population lives. In this course you will learn through readings, lectures and a pair of exercises focused on different types of primary historical sources about how cities have developed, together with the civilizations with which they are associated. Urban historical geographers make use of special kinds of data sources. In this course you will learn to use some of the most important of these -- maps, atlases, and associated data. You will complete a pair of exercises utilizing late-Renaissance/early modern urban maps of European cities, and Sanborn fire insurance maps of Minneapolis and St. Paul from the turn of the last century. The goal of both exercises is to help you learn how to integrate historical cartographical materials with other forms of information on past urban environments, economies, social formations, and development processes. The exercises are designed to require that you supplement cartographic information with data from other, related sources, and to engage in individual research activities that will allow you to discover on your own how historical geographers recapture and reinterpret past urban environments. 50% of grade from the exercises, 50% from the midterm and final, study guides are distributed.
Grading: 20% mid exam, 25% final exam, 50% special projects, 5% attendance.

Geog 3379 Environment and Development in the Third World

A-F only, 3 credit(s); Soph or Jr or srCredit will not be granted if credit has been received for: GLOS 3303; Meets CLE req of Environment; meets CLE req of Social Sciences
Instructor: Samatar, Abdi Ismail
Description: This course has three objectives: (a) to advance students' knowledge of the dynamics of capitalism as a global system, its insatiable appetite for resources, and effect on human development; (b) to give students analytical tools to understand the relationship between this expansive system, its enormous productive and destructive capacity (social and ecological); (c) to enable students to gain substantive knowledge about how this system impacts on Africa, Asia, and Latin America, and the social and ecological struggles in those regions. Topic covered include: Dynamics and patterns of economic development; Uneven global consumption of natural resources; Poverty and over-consumption as the twin sources of environmental degradation; Population and development, Urban environment in the South; Gender-class and environmental struggles; waste and the global commons. Teaching methods: There are lectures and one discussion session per week. Several students will lead each weekly discussion of current environment/development topic. We watch and critique several documentaries. Authors include: Bina Agarwal, Barry Commoner, Michael Watts, P. Blaikie; Dharam Ghai; David Harvey. Intended audience: Social and natural science undergraduates.
Style: 60% Lecture, 20% Film/Video, 20% Discussion.
Grading: 30% mid exam, 30% final exam, 25% reports/papers, 5% special projects, 10% class participation. class participation, examinations.

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: STAFF
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.

**Style:** 75% Lecture, 15% Film/Video, 10% Discussion.

**Grading:** 20% mid exam, 30% final exam, 50% reports/papers.

**Exam Format:** Multiple choice, short answer, and essay

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**Geog 3521 Digital Planet: Understanding Your World in the Information Age**

**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 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

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**Geog 3531 Numerical Spatial Analysis**

**Description:** The fundamental objective of this course is to teach the appropriate uses of basic quantitative methods for the description and analysis of spatial and non-spatial data that are typical in geographic inquiry. The first several weeks of the class deal with the nature of data, descriptive statistics, and data exploration techniques. We will then transition into the fundamental concepts of statistical data analysis: distributions, probability, and sampling. Subsequently, the final third of the course introduces several different methods of analyzing data of different kinds and inferring information and conclusions about the population using your samples. In all cases, the spatial nature of data and its analysis will be emphasized.

Foremost, this is an introductory course in statistics that makes use of geographic problem scenarios rather than a course on spatial statistics using georeferenced data.

**Instructor:** Martin Swobodzinski

**Style:** 40% Lecture, 30% Laboratory, 30% Small Group Activities. The lecture time will be split into a lecture element and individual work on spot checks which are an important preparation for the exams.

**Grading:** 17% mid exam, 30% final exam, 18% additional semester exams, 35% laboratory evaluation.

**Exam Format:** Primarily short answer questions. Exams are closed-note and closed-book.

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**Geog 3561 Principles of Geographic Information Science**

**Description:** This course introduces the fundamental concepts of geographic information systems (GIS) and geographic information science (GIScience). In addition, it provides for hands-on experience with two of the several powerful GIS packages on the market, that is, ArcGIS, from Environmental Systems Research Institute (ESRI), and IDRISI, from Clark University. By the end of the course, students will be equipped to: understand the tools of a GIS and be able to explain and use them ?locate, import, manipulate, and display geographic information in a GIS ?describe and engage in the debates and themes in geographic information science

**Instructor:** Swobodzinski, Martin

**Style:** 35% Lecture, 1% Film/Video, 2% Discussion, 50% Laboratory, 2% Small Group Activities, 10% Student Presentation. Graduate students enrolled in Geog 5561 are asked to complete an individual class project and course paper. They are encouraged to share their findings in short presentations with the rest of the course.

**Grading:** 15% mid exam, 20% final exam, 15% additional semester exams, 50% laboratory evaluation. There will be a total of 10 graded lab exercises with the last one being offered for extra credit.

**Exam Format:** Combination of multiple-choice or matching questions and short-answer questions (e.g., multi-part fill-in-the-blank questions and questions that require a phrase, a short list or a sketch). Exams are closed-note and closed-book.
Geog 3900 Topics in Geography: Food, Culture and Society
3 credit(s); max credits 9, 3 completions allowed;
Instructor: Cadieux,Kirsten Valentine
Description: Hamburgers and a Coke, rice and beans, collard greens, wonton soup, creme brulee ? What meanings and feelings do these foods conjure up, and for whom? Where are their key ingredients produced? Who prepares these dishes, and who eats them? This course is built on two key premises: first, that the production, distribution, and consumption of food involves relationships among different groups of people, and second, that one can gain great insights into these social relations and the societies in which they are embedded through a sociological analysis of food. Among the themes we will explore in this course are the different cultural and social meanings attached to food; food, culture and body image; the industrialization of agriculture; the global food system; work in the food sector; the debate over genetically modified food; and efforts to change the current food system.

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: Why do we have two cities here? Explore, discuss and learn about this Twin Cities region.... 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 and what inequities can we observe? -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, and videos) will be used extensively. Field studies make up the bulk of the course - 60% of grade. You will get to know Minneapolis and St Paul in unique ways. All readings available on the Moodle site. Mid-term is short answer and map test, Final is cumulative and short answer and essay. Test study guide are given out. Some assignments differ for the 1973 level. In all assignments those registered in 3973 are expected to perform at a much higher level of analysis, and this will be reflected in the final grading curve.
Style: 75% Lecture, 10% Film/Video, 10% Discussion, 5% Small Group Activities.
Grading: 20% mid exam, 25% final exam, 50% reports/papers, 5% attendance.

Geog 3985W Senior Project Seminar
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: The senior project seminar is a capstone course that encourages you to demonstrate what you have learned and what you learned to do as a Geography major. The instructor will guide you through a simulated research project that will require you (a) to extract relevant data from primary sources, such as the censuses of population and agriculture; (b) to convert these data into appropriate maps and graphs; and (c) to write a carefully polished paper that describes what you have discovered, and demonstrates your skills to a prospective employer. Class Time: one group meeting, subsequent weekly one-on-one half-hour meetings with the instructor. Work Load: six to ten hours extracting census data, twenty to forty hours constructing maps and graphs, fifty plus hours writing and polishing your final paper. Grade: 100% on the quality of the final paper.
Style: Limited in-class meetings and one-on-one consultation with instructor
Grading: 100% reports/papers.

Geog 3996H Honors: Senior Project Directed Research
A-F only, 3-4 credit(s), 1 completion allowed; instr consen, dept consen, college consen Credit will not be granted if credit has been received for: GEOG 3996;
Instructor: Powell,Glen L
Description: Student may contact the instructor or department for information.

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: The fundamental objective of this course is to teach the appropriate uses of basic quantitative methods for
the description and analysis of spatial and non-spatial data that are typical in geographic inquiry. The first several weeks of
the class deal with the nature of data, descriptive statistics, and data exploration techniques. We will then transition into the
fundamental concepts of statistical data analysis: distributions, probability, and sampling. Subsequently, the final third of the
course introduces several different methods of analyzing data of different kinds and inferring information and conclusions
about the population using your samples. In all cases, the spatial nature of data and its analysis will be emphasized.
Foremost, this is an introductory course in statistics that makes use of geographic problem scenarios rather than a course
on spatial statistics using georeferenced data. INSTRUCTOR: Martin Swobodzinski
Style: 40% Lecture, 30% Laboratory, 30% Small Group Activities. The lecture time will be split into a lecture element and
individual work on spot checks which are an important preparation for the exams.
Grading: 17% mid exam, 30% final exam, 18% additional semester exams, 35% laboratory evaluation.

Geog 5561 Principles of Geographic Information Science
4 credit(s);
Instructor: Swobodzinski, Martin
Description: This course introduces the fundamental concepts of geographic information systems (GIS) and geographic
information science (GIScience). In addition, it provides for hands-on experience with two of the several powerful GIS
packages on the market, that is, ArcGIS, from Environmental Systems Research Institute (ESRI), and IDRISI, from Clark
University. By the end of the course, students will be equipped to: understand the tools of a GIS and be able to explain
and use them locate, import, manipulate, and display geographic information in a GIS describe and engage in the
debates and themes in geographic information science
Style: 35% Lecture, 1% Film/Video, 2% Discussion, 50% Laboratory, 2% Small Group Activities, 10% Student
Presentation. Graduate students enrolled in Geog 5561 are asked to complete an individual class project and course
paper. They are encouraged to share their findings in short presentations with the rest of the course
Grading: 15% mid exam, 20% final exam, 15% additional semester exams, 50% laboratory evaluation. There will be
a total of 10 graded lab exercises with the last one being offered for extra credit.
Exam Format: Combination of multiple-choice or matching questions and short-answer questions (e.g., multi-part fill-in-the-blank questions and questions that require a phrase, a short list or a sketch). Exams are closed-note and closed-book.

Geog 5562 Geographic Information Science and Analytical Cartography
3 credit(s);
Instructor: Lindberg, Mark B
Description: Student may contact the instructor or department for information.

Geog 5565 Geographical Analysis of Human-Environment Systems
3 credit(s);
Instructor: Manson, Steven M.
Description: Spatial analysis and modeling are used to understand a range of human and environmental systems. The
course will focus on agent based modeling of spatial processes, patterns, and relationships. Agent based modeling is a
fast-emerging analytical approach in many disciplines. It involves simulating the behavior and relationships of autonomous
agents, which range from simple particles to complex groups, in order to understand the nature of individuals and systems
of which they are part. Our core readings center on human-environment systems, but student interest will lead the class to
a larger array of research domains that could range from ecological dynamics such as predator-prey relationships or
animal movement to human systems such as cities or economies. See the course URL for more information, including a
syllabus.
Style: 20% Lecture, 20% Discussion, 60% Laboratory. We spend 1 hours in lecture/discussion, and 1.5 hours in the lab
doing hands-on work.
Grading: 78% reports/papers, 22% class participation. The bulk of grading is for a student project that involves
programming and writing.

Geog 8001 Problems in Geographic Thought
A-F only, 3 credit(s);
Instructor: Henderson, George Lawlor
Description: Student may contact the instructor or department for information.

Geog 8230 Theoretical Geography
3 credit(s);
Instructor: Saldanha, Arun
Geog 8260 Seminar: Physical Geography
3 credit(s);
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: 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: 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.
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 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Kayzar, Brenda
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: St. George, Scott
Description: Student may contact the instructor or department for information.

Geog 8980 Topics in Geography: Sexuality and Space
1-3 credit(s), max credits 15, 10 completions allowed;
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: 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
Description: Student may contact the instructor or department for information.

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: Braun, Bruce Philip
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Gidwani, Vinay Krishin
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: Kipfmuller, 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: Detournay, Emmanuel Michel
Description: Student may contact the instructor or department for information.

GeoE 3301 Soil Mechanics I
A-F only, 3 credit(s);
Instructor: Detournay, Emmanuel Michel
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: Rendahl PhD, Merry
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 4311 Rock Mechanics
A-F only, 4 credit(s);
Instructor: Labuz, Joseph F
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: Guzina, Bojan B
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 MoosT

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: STAFF  
Description: Teaches 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, 15% reports/papers, 4% special projects, 30% quizzes, 28% class participation. 13% Reading/group work assignments and computer and audio lab.  
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: See attached syllabus  
Exam Format: Online

Ger 1002 Beginning German
Ger 1004 Intermediate German
5 credit(s);
Instructor: STAFF
Description: Students in this course will be working 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, role-plays, and internet research of cultural topics. Process-writing essays, presentations on cultural topics, and short interviews round out the course. 

Exam Format: Written, oral interviews

Ger 1002 Beginning German
5 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 Elvis in Koln 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, 15% reports/papers, 4% special projects, 30% quizzes, 28% class participation. 13% Reading/group work assignments and computer/audio lab.

Exam Format: Written.

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
Ger 3011W Conversation and Composition

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: 10% Lecture, 10% Film/Video, 30% Discussion, 35% Small Group Activities, 15% Student Presentation.
Grading: 30% reports/papers, 25% quizzes, 10% journal, 25% in-class presentation, 10% class participation.

Ger 3012W Conversation and Composition

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: 10% Lecture, 10% Film/Video, 30% Discussion, 35% Small Group Activities, 15% Student Presentation.
Grading: 30% reports/papers, 25% quizzes, 10% journal, 25% in-class presentation, 10% class participation.
Ger 3520 Topics in Austrian and Central European Culture: Death in Vienna
3 credit(s);Meets CLE req of Writing Intensive
Instructor: Morris, Leslie C
Description: This course examines the long history of the representation of death in Austrian culture, beginning with finde-siecle Vienna (including Crown Prince Rudolph’s ?Liebestod? in 1898 in Mayerling) and continuing into the present-day discussions of Holocaust memorials in Austria. Looking at a wide variety of texts drawn from literature, art, music, and film, we will explore key concepts in Austrian culture such as the aestheticization of death; "Endzeit" of the Austro-Hungarian empire; language, silence and death; death and eros; genocide and suicide, and memory, elegy, and nostalgia.
Style: 20% Lecture, 80% Discussion.
Grading: Requirements include a polished oral presentation (7-8 minutes) in German and three papers (4 pages each), one in German, one in English, one in German or English.

Ger 3501 Contemporary Germany
3 credit(s);
Instructor: Ianeva-Lockney, Arsena
Description: This course is aimed at students with advanced knowledge of German and will give them the opportunity to learn about German companies, industry sectors and their products. In addition to readings from the textbook, the students will summarize current articles from the German business press and from a German podcast. For their oral presentations, students will acquire knowledge regarding how to describe the size and activities of a company, how to read an organization chart and interpret graphics. Writing assignments will focus on business correspondence and will include detailed instruction on writing the most frequently used types of letters.
Style: 20% Lecture, 20% Discussion, 20% Small Group Activities, 20% Student Presentation, 10% Web Based. in class writing - 10%
Grading: 20% special projects, 20% quizzes, 10% written homework, 10% attendance, 20% in-class presentation, 20% class participation.

Ger 3104W Reading and Analysis of German Literature
3 credit(s);Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Teraoka, Arlene A
Description: GER 3104W this semester will feature tales of obsession and madness by authors such as Ludwig Tieck, ETA Hoffmann, Franz Kafka, and Friedrich Durrenmatt. Brief background lectures will provide orientation for our class discussions. In class sessions you will be expected to share, test, and develop your ideas to the best of your ability in German. As a Writing Intensive course GER 3104W also provides support to you as you formulate and present interpretive arguments on the basis of textual evidence. Lectures, class discussions, student presentations, and all readings are in German. Meets Lib Ed req of Literature Core; meets Lib Ed req of Writing Intensive.
Style: 20% lecture; 80% discussion, in-class group assignments, short written responses, and student presentations
Grading: Requirements include a polished oral presentation (7-8 minutes) in German and three papers (4 pages each), one in German, one in English, one in German or English.

Ger 3501 Contemporary Germany
3 credit(s);
Instructor: STAFF
Description: GDR: Visual Memory of Documentary Films</b> <p> Almost 25 years after the end of the German Democratic Republic (GDR) the only way to experience this political state, this imaginary homeland, is through its legacy of images and stories. This course presents documentary films made in and about the GDR and explores their afterlife in our visual memory. <p> The central issues of this course include: exploring aesthetic profiles, the potential of documentary remembrance and film historiography, and the oscillation of the documentary between ideology and "the search for reality."
In weekly screenings we will watch films about a vital society that current students are only now becoming acquainted with. Early documentary films that presented a collective identity, promoted an ideological self-assurance and propagated a new society utilizing newly manufactured historical images. Later films that reflected the conflicting lives under Real Existing Socialism and eventually registered the failure of this second German state. And current documentary films that recall a vanished society and the biographies it coined. As a media of remembrance these films encourage a kind of remembrance that challenges common formulas and secure them from oblivion. <p> During one presentation, devoted to the annual media event, ?German Unification Day?, we will raise the questions that focus on what is remembered and what is forgotten in the current Federal Republic of Germany on the basis of these live broadcasts.
Style: 20% Lecture, 30% Film/Video, 30% Discussion, 20% Student Presentation.
Grading: 40% written papers, 40% group work and student presentation, 20% film log.

Ger 3520 Topics in Austrian and Central European Culture: Death in Vienna
3 credit(s), max credits 9, 3 completions allowed;
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 3610 German Literature in Translation: King Arthur in Romance & Film
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Wakefield, Ray M
Description: Ger 3610 is an introduction to the narratives of King Arthur and their reception in films. It is intended for any student with an interest in film and the European Middle Ages. We’ll be pairing historical and literary texts with filmic texts dealing with similar content. Our engagement with each medieval text will focus on the chronological and cultural distance from our own era. The viewing and analysis of each film will concentrate on the problematic reception of medieval culture in modernity. Our work with the medieval texts will confront us with such topic areas as: the role of women; the perception of space; the process of thought; the function of memory; and courtly culture in its relation to Feudal-Christian culture. We will read, in English translation, a wide selection of Arthurian works from the pre-modern era, e.g.: Wolfram von Eschenbach, Parzival; Culhwch and Olwen; Geoffrey of Monmouth, Historiae Regum Britannie; Sir Thomas Malory, Le Morte Darthur. Our films will represent diverse approaches to the representation of medieval culture in modernity, e.g.: Becket (Glenville, 1964); The Sword in the Stone (Disney, 1963); The Fisher King (Gilliam, 1991); Monty Python and the Holy Grail (Gilliam and Jones, 1974); Excalibur (Boorman, 1981); and The Seventh Seal (Bergman; Swedish, 1957).

Ger 3610 German Literature in Translation: Holocaust in Film: Israeli & German documentaries
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Schory, Noemi
Description: Student may contact the instructor or department for information.

Ger 3651 Thinking Environment: Green Culture, German Literature and Global Debates
3 credit(s); Meets CLE req of Environment; meets CLE req of Literature
Instructor: Melin, Charlotte Ann
Description: Known as the country of poets and thinkers, Germany is claiming the title of land of ideas for environmental innovation. This course (taught in English, with assignments in German for students who know the language) looks at how sustainability became mainstream, proposing that German literature and culture, exploring how literary and non-fiction writing, film, and the arts helped reshape environmental imagination. Public concern about environmental issues drives social, political, and cultural change in German-speaking countries today, a trend visible in the success of the Green party, plans to decommission nuclear power plants, and cradle-to-cradle design. The origins of this movement have deep historical roots in German culture. Notions of sustainability developed around early forestry practice and writers, like the Romantics, found inspiration in the natural sublime. Later, important German scientific discoveries fundamentally defined environmental inquiry. After 1945 (and National Socialist glorification of nature), however, environmental activism lagged behind. This course explores how the involvement of writers, artists, film makers, and other public intellectuals helped connect the components necessary for sustainability to succeed (economy, society, and environment). Frequent comparisons will be made with global developments, particularly the U.S. Our starting point will be Faust (by Goethe) and a contemporary novel by Daniel Kehlmann about the early scientist Alexander von Humboldt. We will also read a novella about the Chernobyl, excerpts from a science fiction novel, and analyze films and other media. Course work will include a simulation focused on the turn to renewable energy. Graduate students will be asked to engage in more extensive assignments.

Style: 40% Lecture, 20% Film/Video, 15% Discussion, 15% Small Group Activities.
Grading: 15% mid exam, 30% reports/papers, 20% special projects, 20% in-class presentation, 15% class participation.
Exam Format: Midterm exam: short-answer format.

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.
Known as the country of poets and thinkers, Germany is claiming the title of land of ideas for environmental innovation. This course (taught in English, with assignments in German for students who know the language) looks at how sustainability became mainstream, proposing that German literature and culture, exploring how literary and non-fiction writing, film, and the arts helped reshape environmental imagination. Public concern about environmental issues drives social, political, and cultural change in German-speaking countries today, a trend visible in the success of the Green party, plans to decommission nuclear power plants, and cradle-to-cradle design. The origins of this movement have deep historical roots in German culture. Notions of sustainability developed around early forestry practice and writers, like the Romantics, found inspiration in the natural sublime. Later, important German scientific discoveries fundamentally defined environmental inquiry. After 1945 (and National Socialist glorification of nature), however, environmental activism lagged behind. After 1945 (and National Socialist glorification of nature), however, environmental activism lagged behind.
Ger 8820 Seminar: Advanced Theory: Forms of Critique: Adorno, Foucault and Beyond

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Rothe, Matthias
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and

Ger 8300 Topics in Literature and Cultural Theory: Kluge: Literature, Film, Theory, Television

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

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 5610 German Literature in Translation: King Arthur in Romance & Film

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Wakefield, Ray M
Description: Ger 5610 is an introduction to the narratives of King Arthur and their reception in films. It is intended for any student with an interest in film and the European Middle Ages. We'll be pairing historical and literary texts with filmic texts dealing with similar content. Our engagement with each medieval text will focus on the chronological and cultural distance from our own era. The viewing and analysis of each film will concentrate on the problematic reception of medieval culture in modernity. Our work with the medieval texts will confront us with such topic areas as: the role of women; the perception of space; the process of thought; the function of memory; and courtly culture in its relation to Feudal-Christian culture. We will read, in English translation, a wide selection of Arthurian works from the pre-modern era, e.g.: Wolfram von Eschenbach, Parzival; Culhwch and Olwen; Geoffrey of Monmouth, Historiae Regum Britanniae; Sir Thomas Malory, Le Morte Darthur. Our films will represent diverse approaches to the representation of medieval culture in modernity, e.g.: Becket (Glenville, 1964); The Sword in the Stone (Disney, 1963); The Fisher King (Gilliam, 1991); Monty Python and the Holy Grail (Gilliam and Jones, 1974); Excalibur (Boorman, 1981); and The Seventh Seal (Bergman; Swedish, 1957). Undergraduates registered under this number will be required to complete additional readings and short papers. Graduate students will be required to complete a final research paper.

Ger 5734 Old Saxon

3 credit(s);
Instructor: Liberman, Anatoly
Description: Old Saxon is one of the medieval Germanic languages, and thus it aligns itself with Old English, Old High German, and Old Norse. Numerous business documents have been preserved in Old Saxon, but in college curricula it owes its fame to a poem called HELIAND ?The Savior,? a versified story of the life of Jesus Christ. It is beautiful poetry. From a linguistic point of view Helian is much easier than the Old English Beowulf or the Old High German Evangelienbuch by Otfrid. <p> One semester is too short for reading the whole poem but long enough for covering the best passages. Since it is impossible to predict who will enroll in the course, it is assumed that some students will have had no previous exposure to any Old Germanic texts. Therefore, the beginning will be slow. But the language of the poem is repetitive, and by November we'll be able to increase the speed very considerably. Those participants to whom Modern German is not quite foreign will soon notice how close Old Saxon is to German. <p> The course will be organized as a reading group. Since no one comes to Old Saxon who is not interested in it, no tests will be required. Nor are papers envisioned. However, if someone happens to need an extra paper for credit or because his or her interest will be piqued by the subject, such projects will be discussed on an individual basis. The only strict requirement is regular attendance and good preparation for every class. A relatively cheap book is all that the students will have to buy.

Ger 5930 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: Kluge: Literature, Film, Theory, Television

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

Ger 8820 Seminar: Advanced Theory: Forms of Critique: Adorno, Foucault and Beyond

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Rothe, Matthias
Description: Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and
share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.

**Style:** 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.

**Grading:** 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.

### Ger 8820 Seminar: Advanced Theory: Forms of Critique: Adorno, Foucault and Beyond

- **Description:** Both Theodor W. Adorno and Michel Foucault develop a philosophy of history centered on the concept of enlightenment, explore the relation between rationality and power, attempt to exercise a form of immanent critique, and share a great number of reference authors such as Kant, Hegel, Marx, Nietzsche and Husserl. Yet the perspectives on society that they put forward, as well as the critical interventions they encourage, differ radically. Their enterprises seem to be related in the form of a mirror image. In this course we will explore first and foremost the differences between these philosophers to work out the intricate logic of their projects: assess method and style of their proceedings, historically contextualize them, and discuss their legacy. A reader will be provided containing the English texts; texts in original language will be available on moodle.

**Style:** 30% Lecture, 30% Discussion, 10% Small Group Activities, 20% Student Presentation.

**Grading:** 30% reports/papers, 20% written homework, 20% in-class presentation, 30% class participation.

### German, Scandinavian, and Dutch

**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:** Rothe, Matthias

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

**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:** Rothe, Matthias

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

**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. 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.

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**GSD 8001 Approaches to Textual Analysis**

- **3 credit(s);**
- **Instructor:** Hueser, Rembert
- **Description:** Student may contact the instructor or department for information.

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**Gerontology D-351 Mayo (Box 197 UMHC)**

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**Gero 5100 Topics in Gerontology**

- **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.

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**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 and the field of 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.

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**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
- **Description:** I. Course Description This on-line course provides an introduction to 15 major topics in geriatrics. It is designed to be understood by individuals trained in multiple disciplines. It offers relevant information to understand how to diagnose and treat conditions common in caring for older people. Each topic has been developed by a national expert on that subject. Each lesson has a test to assure the learner has understood the material. II. Course Prerequisites None III. Course Goals and Objectives At the completion of this course students should be able to: 1. Describe the major characteristics of each condition 2. Describe the basis for diagnosing each condition 3. Discuss the treatment options for each condition 4. Discuss the general principles of geriatric management of interacting conditions 5. Describe condition-specific contextual issues and solutions for health care providers IV. Methods of Instruction and Work Expectations This is an on-line course. Each session includes a lecture by a national expert, module-specific objectives, lecture notes, references and a self-administered quiz that assesses the learner’s mastery of the material. V. Course Text and Readings Optional text Kane RL, JC Ouslander, and IB Abrass, Essentials of Clinical Geriatrics, Fifth Edition, McGraw Hill, New York, 2003.

**Gero 5125 Gerontology Service Learning**
- **3 credit(s);**
- **Instructor:** STAFF
- **Description:** This course combines experiential learning and service learning by integrating students into a residential community of seniors. Students will have choices of senior communities in the metro area at which to serve (and possible live for the semester or year at a discounted rent while completing course requirements). The course requires at least 100 hours of service to seniors or organizations serving seniors. All students must have a longitudinal one-on-one relationship with at least two seniors lasting at least 4 months (or three months prior to death). Activities may include the following or other approaches identified by the student: friendly visiting, escorting seniors to medical appointments, chore services, teaching health education to groups of seniors and staff, participating in social or recreational activities with seniors, assisting with immunization and screening programs, assisting seniors with selection of health plans, or providing volunteer home health aide or nursing assistant services or emergency non-medical response under the supervision of a nurse. Students may use up to 25% of their service time for projects that benefit the campus as a whole such as environmental improvements, assisting staff with grant writing, or campus technology enhancements. Academic requirements include reading, monthly class discussions, a term paper and weekly self-reflections. II. Course Prerequisites Consent of instructor is required and course registration is limited to graduate and professional students. III. Course Goals and Objectives Students will be able to: - Assist seniors in overcoming barriers to obtaining medical services. - Advocate on behalf of individual seniors and the senior population. - Describe ways community and recreational services and activities enhance life among seniors. - Educate seniors about aging related issues. - Promote seniors? quality of life through health screening programs, healthy life styles, preventive health services (e.g. immunizations, home safety), participation in activities, and improved access to food. - Perform geriatric assessments in areas such as function, spirituality, environment, and social connections. - Reduce permanent moves to nursing homes through monitoring, direct assistance, and advocacy. IV. Methods of Instruction and Work Expectations This course uses a variety of approaches to student learning, including group discussion, reading, self-reflective writing on-line, experiential learning, and service learning. The service will include both direct assistance to seniors plus development and presentation of educational seminars to a group of seniors and to a group of health care professionals.

**Grading:** 15% reports/papers, 10% journal, 15% reflection paper, 10% in-class presentation, 10% class participation, 40% other evaluation.

**Gero 5191 Independent Study: Gerontology**
- **OPT No Aud, 1-4 credit(s), max credits 16, 4 completions allowed;**
- **Instructor:** Lee, Hee Yun
- **Description:** Student may contact the instructor or department for information.

**Gero 8021 Application of Proteomics to Aging**
- **S-N only, 1 credit(s);**
- **Instructor:** Ferrington, Deborah Ann
- **Description:** Student may contact the instructor or department for information.

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**Global Studies 214 Social Science**
GloS 1015W Globalization: Issues and Challenges  
4 credit(s); Credit will not be granted if credit has been received for: GLOS 1015V; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive  
Instructor: Isett, Christopher Mills  
Description: History 1015W is an account of the significant developments in global history since roughly the beginning of the 20th century. Through lectures, class readings, writing exercises, and section discussions, we will cover economic, political, social, and cultural developments that have shaped our world. Our course is intended to give you a basic framework of events and processes so that you will be able to situate yourself in complex strands of contemporary change, from the transformations underway in the Arab world, to the dilemmas of European integration, to the problem of American power, and China's ongoing political and economic transformations. These subjects cannot be understood without reference to processes of imperialism and decolonization, the rise of mass democratic states with universal suffrage, the emergence of global media systems, and the ongoing self-invention and adaptation of finance capital to new regions of the globe. As this is a writing intensive course, the course will pay close attention to improving students' writing skills, in the context of a variety of in-class and at-home assignments.

GloS 1015W Globalization: Issues and Challenges  
4 credit(s); Credit will not be granted if credit has been received for: GLOS 1015V; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive  
Instructor: Hampton, Melissa L  
Description: Student may contact the instructor or department for information.

GloS 1015W Globalization: Issues and Challenges  
4 credit(s); Credit will not be granted if credit has been received for: GLOS 1015V; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive  
Instructor: Jungnitsch, Aaron  
Description: Student may contact the instructor or department for information.

GloS 1910W Topics: Freshman Seminar: The End of the Nation?  
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive  
Instructor: Viestenz, William R  
Description: Student may contact the instructor or department for information.

GloS 3144 Knowledge, Power, and the Politics of Representation in Global Studies  
4 credit(s); 6 cr. of approved preparatory coursework [recommended GLOS 1015W or 1112] Credit will not be granted if credit has been received for: GLOS 3144H  
Instructor: Kaminsky, Amy K  
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. of approved preparatory coursework (recommended GLOS 1015W or GLOS 1112), Honors Credit will not be granted if credit has been received for: GLOS 3144;  
Instructor: Kaminsky, Amy K  
Description: Student may contact the instructor or department for information.

GloS 3219 History of Capitalism: Uneven Development Since 1500  
3 credit(s); Credit will not be granted if credit has been received for: HIST 3419;  
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 3231 Geography of the World Economy  
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Using medicine as an optic, this class explores how ‘other worlds?’ get created and maintained. What is meant by the ‘other?’ and the worlds of which ‘others?’ are a part? What mechanisms are used to delineate ‘normal?’ versus different, and to what ends are these conceptualizations used? How do definitions of ‘other?’ play out globally as well as domestically? There are many means – legal, discursive, social, political, economic? to create ‘other worlds?, but in this class we focus on the ways in which, medicine, as a set of practices embedded in cultural systems and power relations, has played a pivotal part in the creation, maintenance, and visibility of otherness historically and currently.

Medicine also serves as a locus for highlighting the clash of ‘other worlds?, as well as playing a role in both creating and addressing those diseases globally that speak of gross inequities in resources. In order to explore all of these themes of medicine, disease, and the production of ‘other worlds?, we will have modules during the course of the semester. We will begin by looking at colonial medicine; the theories colonial physicians devised concerning colonized bodies and differential sufferings. We then look at the nexus of medicine and radicalizations in the United States, as well as current examples of medical practices globally that raise ethical questions concerning medicine’s role in public health. Our next module will look at disease outcomes for global inequalities and the role of medicine in both perpetuation inequalities through neglect or the pursuit of more profitable ventures, and the potential and promise of medicine to ameliorate global disease and its attendant suffering. Our last module will look at medicine and disease as a point of conflict between ‘other worlds?, with case studies within the U.S. and internationally. At its foundation, then, this class encourages a critical awareness of the myriad configurations of otherness at the individual or place level, including cultural marginalization, economic inequity, gender-, sexual-, class-, ethnic-, national-orientation, disease versus healthy. It also explores the means by which otherness is produced, the dynamic nature of these productions, and the exigencies within which definitions of ‘otherness?’ change, regroup, or dissolve at various points in time and place. It also seeks to raise the question of why ‘other world? have been,
and continue to be, produced. What function does otherness serve in the world, in society, and in capitalism?

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

**Grading:** 25% mid exam, 25% final exam. 10% Paper One, 10% Paper Two, 15% Response paragraphs (6)

**GloS 3613W Food, Culture, and Society**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: SOC 3613W; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive

**Instructor:** Cadieux, Kirsten Valentine

**Description:** Hamburgers and a Coke, rice and beans, collard greens, wonton soup, creme brulee What meanings and feelings do these foods conjure up, and for whom? Where are their key ingredients produced? Who prepares these dishes, and who eats them? This course is built on two key premises: first, that the production, distribution, and consumption of food involves relationships among different groups of people, and second, that one can gain great insights into these social relations and the societies in which they are embedded through a sociological analysis of food. Among the themes we will explore in this course are the different cultural and social meanings attached to food; food, culture and body image; the industrialization of agriculture; the global food system; work in the food sector; the debate over genetically modified food; and efforts to change the current food system.

**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:** The tension, anxiety, and hatred between Islam and the West have historical, philosophical, and ideological roots. "Islam and the West" examines those roots and looks for common ground. The course is divided into three parts. Part one studies the principles and beliefs of Sunni and Shi'ite Muslims in the context of pre-Islamic civilizations of the Mediterranean world. Part two studies the interaction between great medieval thinkers, concentrating on the fateful decision that each made: Muslim theologians set a spiritual course for Islam while Western theologians supported reason as well. Part three discusses the development of events in the Middle East from W.W.1 to the present, which includes, among other things, the division of the Middle East into nation-states, Pan-Islamism, the rise of the Muslim Brotherhood, 9/11, and the Arab Spring.

**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

**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:** Nelson, Sara Holiday

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

**GloS 3705 Transnational Migration**

3 credit(s); Soph, Jr, or Sr Credit will not be granted if credit has been received for: SOC 3505;

**Instructor:** Abdi, Cawo

**Description:** How is transnationalism or cross border social and economic relations maintained and perpetuated? How are these relations affecting identity? How is current transnationalism different from earlier migration? Is this gendered, and if so, how and why? The objective of this course is to explore these questions through theoretical and case study based literature on the subject. The first part of the course provides a historical overview on migration over the last two centuries. The second section centralizes identity in terms of transnational or dispersed communities. The aim of this section is to introduce the complex web of culture, agency and structure in play when dealing with migration. The third section presents case studies on the social and economic relations of transnational communities. The nature of family connections across borders and the economic ties of those who migrated with their families in the home country is discussed. The role of gender in these relations is also explored. The final section of the course deals with the role of the nation-state in transnational migration.

**Style:** 50% Lecture, 20% Film/Video, 30% Discussion.

**Grading:** 30% mid exam, 30% final exam, 30% written homework, 10% class participation.

**GloS 3900 Topics in Global Studies: Novels and Nations**

3 credit(s), max credits 15, 3 completions allowed;

**Instructor:** Kaminsky, Amy K

**Description:** One of the ways nations constitute themselves is through narratives, including fictional narratives, that shape national consciousness. Nevertheless, the dominant narratives of nation often fit badly with the realities of marginalized groups. In this class we look at the ways historically marginalized groups including women, ethnic minorities, political dissidents, exiles, and sexual minorities both participate in and disrupt the dominant narratives of nation. The literary texts are all taken from the Southern Cone of Latin America: Argentina, Chile, and Uruguay. This regional focus will allow us to
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 it attaches to the wall of reality and an unethical treatment of animals.

Style: 15% Lecture, 65% Discussion, 20% Small Group Activities.
Grading: 15% mid exam, 45% reports/papers, 20% attendance, 10% in-class presentation, 10% class participation.

It is difficult to think about the contemporary world without the lasting impact European culture has had on all nations. What are the deeper reasons for Europe to emerge as a dominant continent from the sixteenth century onwards? Its physical, cultural, and economic geography will provide some answers. Divided by language, war, and economic crisis, Europe has nonetheless become a kind of test case of how all today's societies are supposed to function. The project of the European Union promises peace and prosperity for some 500 million people in 27 countries, but faces challenges ranging from the euro crisis to xenophobia and climate change. The EU does not cover all of the continent, of course. Who is and could be a member state in itself explains much about the continent's complex history. This course will guide you from Europe's physical make-up and urbanization to the formation of nation-states and colonization of other continents, in order to understand the problems of today.

Style: 60% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Field Trips.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 20% in-class presentation, 20% class participation.
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.

GloS 3960 Topics in South Asian Studies: Indian Feminisms in a Global Context
3 credit(s);
Instructor: Sawhney, Simona
Description: A series of rape cases in India in 2012-13 drew widespread public and media attention. In the protests and debates that followed, it became clear that though everyone wanted "justice," there were several disagreements about what "justice" might entail. At stake were not only questions of sexuality, marriage, and foundational ideas about gendered identity, but also questions concerning caste and class, the death penalty, the privilege of the armed forces, the language of the law, and the powers of the police. In this course, we will study some of the arguments that have unfolded in recent months in the context of the history of the feminist movement in India. Readings and films will focus on several issues including the state's response to violence against women, debates about abortion, the political emergence of a gay rights discourse, and the varied anxieties provoked by the sale of sexual pleasure. We will study these issues in relation to comparable debates in the US and in Europe. Through the course of the semester, we will aim to build a more nuanced and critical approach to gender itself, as it is articulated and acted in everyday life as well as in activist and theoretical discourse.

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: Skaria, Ajay
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 4344 Europe and its Margins
A-F only, 3 credit(s); One course in [ANTH or GLOS] Credit will not be granted if credit has been received for: ANTH 4344;
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.

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 class 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 class 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

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**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.

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**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.

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**Graduate School  316 Johnston Hall**

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**Grad 5102 Preparation for University Teaching for Nonnative English Speakers**

S-N only, 2 credit(s);

**Instructor**: Beers, Barbara Lee

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

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**Grad 5102 Preparation for University Teaching for Nonnative English Speakers**

S-N only, 2 credit(s);

**Instructor**: Beers, Barbara Lee

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

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**Grad 5105 Practicum in University Teaching for Nonnative English Speakers**

S-N only, 2 credit(s);

**Instructor**: Meyers, Colleen Marie

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

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**Grad 5105 Practicum in University Teaching for Nonnative English Speakers**

S-N only, 2 credit(s);

**Instructor**: Meyers, Colleen Marie

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

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**Grad 5105 Practicum in University Teaching for Nonnative English Speakers**

S-N only, 2 credit(s);

**Instructor**: Martin, Kate

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

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**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.

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**Grad 5105 Practicum in University Teaching for Nonnative English Speakers**

S-N only, 2 credit(s);

**Instructor**: Jetter, Mary
Grad 5105 Practicum in University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Jetter, Mary
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
3 credit(s);
Instructor: Wingert, Deborah Ann
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
3 credit(s);
Instructor: Gonzalez, Anita
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
3 credit(s);
Instructor: Alexander, Ilene Dawn
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
3 credit(s);
Instructor: Ching, Paul
Description: Student may contact the instructor or department for information.

Grad 8200 Teaching and Learning Topics in Higher Education: The Academic Job Search
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Alexander, Ilene Dawn
Description: Student may contact the instructor or department for information.

Grad 8200 Teaching and Learning Topics in Higher Education: Teaching for Learning - An Online Course
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Rozaitis, Bill
Description: Student may contact the instructor or department for information.

Grad 8200 Teaching and Learning Topics in Higher Education: Practicum for Future Faculty
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Rozaitis, Bill
Description: Student may contact the instructor or department for information.

Graphic Design 240 McNeal Hall

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
GDes 2342 Web Design
A-F only, 3 credit(s);
Instructor: Cosper, James Louis
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
A-F only, 3 credit(s), max credits 8;
Instructor: Owens, John Lee
Description: Student may contact the instructor or department for information.

GDes 2361 Design Process: Photography
A-F only, 3 credit(s);
Instructor: McCluske, Marit
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: Ott, Ron Henry
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: Boyd Brent, James W
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: 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: Lawton, Debra Lynn  
Description: Student may contact the instructor or department for information.

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 4196Credit 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 4196Credit 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 4196Credit 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
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: Student may contact the instructor or department for information.

GDes 4345 Advanced Typography
A-F only, 4 credit(s);
Instructor: Huff, Richelle Jayne
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 4361W Thesis Studio and Writing
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

GDes 4362 Senior Thesis and Exhibition
A-F only, 4 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, 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: 5341
  Credit will not be granted if credit has been received for: DHA 4384;
  Instructor: Wang, Angela
  Description: Student may contact the instructor or department for information.

GDes 5342 Web and Interface Design
  A-F, 3 credit(s);
  Instructor: Park, Eugene B
  Description: Building upon the foundations of web design, this class addresses the opportunities and complexities in graphic design applied to the development of websites and mobile applications. This approach requires analysis of informational content, the context in which this will function to a target audience, data from usability testing, and to explore options for re-telling or introducing content in visually meaningful and engaging ways.

GDes 5383 Digital Illustration and Animation
  A-F, 3 credit(s);
  Instructor: Chu, Sauman
  Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
  A-F, 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, 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 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: Chu, Sauman
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);
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

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: Martinson, Barbara Elizabeth
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: Sellew, Philip
  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.
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:** Seaberg, Ryan
**Description:** Student may contact the instructor or department for information.

**Grk 5100 Advanced Reading: Plato**
3 credit(s), max credits 18, 6 completions allowed;
**Instructor:** Cole, Spencer E
**Description:** In this course we'll read selections from Plato's Gorgias and Symposium. Topics we'll explore include: Platonic metaphysics and presocratic philosophy, ancient debates about justice, rhetoric and the sophistic movement, ancient Greek sexuality, Greek education and aristocratic culture, the figure of Socrates.
**Style:** 100% Discussion.
**Grading:** 30% mid exam, 30% final exam, 40% reports/papers.

**Grk 5800 Sight Reading for Graduate Students**
S-N only, 1 credit(s), max credits 6, 6 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:** 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: Homer's Iliad
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Nappa, Christopher
Description: In this course we will read the whole of Homer's Iliad, including substantial portions in the original. The Iliad is the earliest of all Greek poems and was central to Greek thought throughout antiquity. We will read it with attention to questions of composition, ethics, language and form. We will also pay attention to the big questions of life and death and their meaning. The focus throughout will be on the Greek text, but students will also read a number of works of modern scholarship (both individually and as a group).

Grk 8910 Seminar: Pastoral
3 credit(s), max credits 30, 10 completions allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

HInf 5436 Seminar
S-N only, 1 credit(s);
Instructor: Gatewood PhD, Lael Cranmer
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: Pakhomov, Serguei V
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: Pieczkiewicz PhD, David Sean
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 5540 Interprofessional Health Informatics
A-F only, 2 credit(s);
Instructor: Khairat PhD, Saif
Description: Student may contact the instructor or department for information.

HInf 8405 Advanced Topics in Health Informatics I: Data Mining
2 credit(s), max credits 9, 3 completions allowed;
Instructor: Simon, Gyorgy Janos
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: 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: 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
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: 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: 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: 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.
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 20 Ruttan Hall

HSM 3521 Health Care Delivery Systems
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 policies, including fee and financial aid restrictions. 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.
Style: 100% Web based
Grading: See attached syllabus

HSM 4561 Introduction to Grant Writing for Health Care and Nonprofit Organizations
A-F only, 3 credit(s);
Instructor: Bahar, Keri L
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. This course will provide you with the tools needed to research and write grants in today's funding and political climate. Today, decreasing government funding at the local, regional, state, and federal levels, along with decreasing traditional educational and other social service funding has resulted in an increased need for nonprofit groups to find new or additional financial support. At the same time, government and nonprofit foundations are significantly increasing support for targeted health care research funding. Students will learn the basics of grant writing, including how to identify potential funding sources, and respond to a Request for Proposal by creating a needs assessment, goal statement, budget, and grant funding plans.
Style: Online
Grading: See attached syllabus

Hebrew 245 Nicholson Hall

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

Hebr 1101 Beginning Biblical Hebrew I
5 credit(s); Credit will not be granted if credit has been received for: HEBR 4104;
Instructor: Levinson PhD, Bernard M.
Description: Student may contact the instructor or department for information.

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

Hebr 3951W Major Project
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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: Levinson PhD, Bernard M.
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.

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
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 4104 Basics of Biblical Hebrew I
3 credit(s); grad student Credits will not be granted if credit has been received for: HEBR 1101;
Instructor: Levinson PhD, Bernard M.
Description: Student may contact the instructor or department for information.

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-Urdu  220 Folwell Hall

HnUr 1011 Beginning Hindi-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: Student may contact the instructor or department for information.

HnUr 1011 Beginning Hindi-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: Kurumathur, Sharika Kapali
Description: Student may contact the instructor or department for information.

HnUr 3021 Intermediate Hindi-Urdu
5 credit(s); 1012 or instr consent 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: Student may contact the instructor or department for information.

HnUr 3021 Intermediate Hindi-Urdu
5 credit(s); 1012 or instr consent 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: Kurumathur, Sharika Kapali
Description: Student may contact the instructor or department for information.

HnUr 3031 Advanced Hindi-Urdu
4 credit(s); 3022 or instr consent Credit will not be granted if credit already received for: HNDI 4161 Credit will not be granted if credit has been received for: HNUR 4005;
Instructor: Hong, Sungok
Description: Student may contact the instructor or department for information.

HnUr 3290 Hindi-Urdu Language Teaching Tutorial
S-N only, 1 credit(s), max credits 2;
Instructor: Hong, Sungok
**Description:** Student may contact the instructor or department for information.

**HnUr 4001 Beginning Hindi-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 1011
- Instructor: Hong, Sungok
- **Description:** Student may contact the instructor or department for information.

**HnUr 4003 Intermediate Hindi-Urdu**
- 3 credit(s); Grad student, [4002 or instr consent] credit will not be granted if credit already received for: HNDI 3101/4003 or URDU 3101/4003
- Credit will not be granted if credit has been received for: HNUR 3021
- Instructor: Hong, Sungok
- **Description:** Student may contact the instructor or department for information.

**HnUr 4005 Advanced Hindi-Urdu**
- 3 credit(s); Grad student, [4004 or instr consent] credit will not be granted if credit already received for: HNDI 4161
- Credit will not be granted if credit has been received for: HNUR 3031
- Instructor: Hong, Sungok
- **Description:** Student may contact the instructor or department for information.

**HnUr 5993 Directed Readings**
- 1-5 credit(s), max credits 15, 3 completions allowed
- Instructor: Sawhney, Simona
- **Description:** Student may contact the instructor or department for information.

**History 1110 Heller Hall**

**Hist 1000W Visions of the Past: Thematic Approaches to Understanding History: Slavery in the Past and Present**
- 4 credit(s), max credits 8; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
- Instructor: Pohlandt-McCormick, Helena
- **Description:** The slave trade is not easily detached from slavery itself nor the slave ship from the middle passage and the plantation, nor the plantation from the modern ghetto and the shantytown, nor the Americas from Africa. This brutal chapter of world history has not simply ended but has helped create our present and our experience of modernity. This class will accept an ethics of global connection to consider the relationship of slavery to our histories and to consider the entangled relationship between Africa and the United States. We will learn how people in the Americas and in Africa struggled to resist, to remake, and to enforce slavery, focusing on the ethical questions involved and on the significance of slavery for our present moment.

**Hist 1000W Visions of the Past: Thematic Approaches to Understanding History: Twin Cities History**
- 4 credit(s), max credits 8; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
- Instructor: Chang, David Anthony
- **Description:** Twin Cities History surveys the dynamic history of the Minneapolis and St. Paul metropolitan region. The course incorporates lectures, discussions, and multimedia presentations that focus on the area's diverse populations and cultures and on the economic, political, and social developments that have shaped the modern metropolis. The course is also intended to offer students first-hand encounters with the Twin Cities past and present; scheduled activities include visits to museums, historic sites, and area landmarks. Specific historical topics include: the development of the region's milling economy; immigration, ethnicity, and refugees in the past and present; the experiences and activism of American Indians in the region; prohibition and crime in the 1920s and 1930s; the 1934 Minneapolis Trucker's Strike; suburban growth and mall culture; and Twin Cities' music scenes in the late 20th century.
- **Style:** 40% Lecture, 30% Discussion, 30% Field Trips.
- **Grading:** 75% reports/papers, 25% attendance.

**Hist 1000W Visions of the Past: Thematic Approaches to Understanding History: WWI - The Great War: A Global History**
- 4 credit(s), max credits 8; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Mathieu, Saje M
Description: This new and exciting class takes a global approach to the examination of World War One's causes and consequences. We will look at how the war unfolded in Europe, Africa, and the Middle East. We will also explore the war's impact on North America and Australasia, areas drawn into the conflict because of their unique relationships with Britain and France. We will consider the special role played by the U.S. in restoring world peace and analyze the lasting social and political cleavages occasioned by the war. On this the eve of the World War One's 100th anniversary, we will get at the heart of how the war was fought and how it is remembered for all of its triumphs and tragedies.

Hist 1011W Civilization and the Environment: World History to 1500
4 credit(s); Fr or soph or non-hist major Credit will not be granted if credit has been received for: HIST 1017; Meets CLE req of Environment; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Casale, Giancarlo
Description: World History: The Origin and Diversity of Human Societies to 1500. In this course we will cover the sweep of history in its broadest sense, from the beginnings of agriculture and the emergence of the first complex human societies in the fourth millennium BCE to the Age of Explorations and the dawn of the modern world circa 1500. Themes to be addressed include trade, religion, technological innovation, the spread of ideas, and the development of the world's great civilizations and their mutual interaction over time.
Style: 60% Lecture, 40% Discussion.
Grading: 15% mid exam, 25% final exam, 30% reports/papers, 30% class participation.
Exam Format: Essay and short answer

Hist 1015W Globalization: Issues and Challenges
A-F only, 4 credit(s); Fr or soph or non-hist major Credit will not be granted if credit has been received for: GLOS 1015W; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Isett, Christopher Mills
Description: History 1015W is an account of the significant developments in global history since roughly the beginning of the 20th century. Through lectures, class readings, writing exercises, and section discussions, we will cover economic, political, social, and cultural developments that have shaped our world. Our course is intended to give you a basic framework of events and processes so that you will be able to situate yourself in complex strands of contemporary change, from the transformations underway in the Arab world, to the dilemmas of European integration, to the problem of American power, and China's ongoing political and economic transformations. These subjects cannot be understood without reference to processes of imperialism and decolonization, the rise of mass democratic states with universal suffrage, the emergence of global media systems, and the ongoing self-invention and adaptation of finance capital to new regions of the globe. As this is a writing intensive course, the course will pay close attention to improving students' writing skills, in the context of a variety of in-class and at-home assignments.

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: Lower, Michael
Description: Europe in the making from Hammurabi to Columbus; conflict, co-existence, and cultural exchange in the first global age: religion (Moses, Jesus, Muhammad); power (Cleopatra, Alexander the Great, Ghengis Khan); conquest (Spartans, Romans, Vikings); culture (Greek sculpture, Islamic philosophy, Mesopotamian epic); everyday life (family life, the commercial revolution, the heavy plough!) We will pursue our subject by engaging intensely with the original documentary remains of the period, including several masterpieces of world culture both written and visual. This course is suitable for majors, non-majors, and transfer students alike.
Style: 45% Lecture, 45% Discussion, 10% Small Group Activities.
Grading: 15% mid exam, 25% final exam, 40% reports/papers, 10% written homework, 10% class participation.
Exam Format: Identifications and essays.
Hist 1411W The Family from 10,000 BCE to the Present

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, 10% 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 1905 Freshman Seminar
A-F only, 3 credit(s);
Instructor: STAFF
Description: In this seminar, we will consider how the line between magic and medicine has changed over time. From accusations of witchcraft to proclamations of scientific breakthrough, we will examine the relationship between the supernatural and the natural during the age of European exploration and Enlightenment (roughly 1500-1800). Specific topics will include the origin of the smallpox vaccine, the use of tobacco for medical purposes, the transmission of healing practices from African slaves and Native Americans to European collectors, and the practice of voodoo. Throughout, we will ask how gender, class, and race have affected the construction of "magic" and "medicine."

Hist 1905 Freshman Seminar: Autobiography in History/History in Autobiography
A-F only, 3 credit(s);
Instructor: Maynes, Mary Jo
Description: What do the French Enlightenment philosopher Jean-Jacques Rousseau, the South African anti-apartheid activist Nelson Mandela, and the Canadian pop singer Justin Bieber all have in common? Yup! They all wrote autobiographies. But they told very different life stories and had different motives for telling them. Historians tend to be skeptical of autobiographies since their authors are bound to be less-than-completely-truthful in writing them. Still, they offer us a take on the past that is unique and not just from the perspective of the famous or powerful. We can also find life stories written or told orally by ordinary people as well. This seminar will explore stories that people tell about their lives in different eras and cultures. And we will address questions about how to read life stories for the historical truths they reveal (and conceal).

Hist 1905 Freshman Seminar: A History of the Drug Wars
A-F only, 3 credit(s);
Instructor: McNamara, Patrick J
Description: When and how did some drugs become a social problem? Why is cocaine illegal in the United States? Who is winning the war on drugs? These questions and others are at the heart of this seminar. We will examine the longer history of controlled substances throughout the Western Hemisphere, focusing in particular on the scope of the so-called war on drugs of the last thirty years. We will read books, articles, and websites dealing with illegal drugs, and we will watch documentary and full-length films dealing with drug use, drug markets, and the violence surrounding drugs. Our study of the past is intended to help us understand the present context and to allow us to imagine a different future regarding these complicated issues.

Hist 1905 Freshman Seminar: History of Football (Soccer)
A-F only, 3 credit(s);
Instructor: Lower, Michael
Description: Football is called the beautiful game. It is also the world's game. Over 700 million people are estimated to have watched the 2010 World Cup Final on television, including some 15.5 million in the U.S. In this class, we will chart the sport's unlikely rise to global prominence. How did a "kicking game" played in a few English public schools in the mid-nineteenth century go on to become the most popular organized pastime the world has ever known? Part of the answer is easy: kicking a ball around a field with friends is a lot of fun. But there has to be more to it than that - the passion football arouses, the delirious joy and the sickening violence it inspires, the allegiances and communities it builds and breaks, the fortunes it makes and unmakes. Why have people all around the world come to care so much about this game?
Style: 20% Lecture, 20% Film/Video, 30% Discussion, 20% Small Group Activities, 10% Student Presentation.
Grading: 30% reports/papers, 20% special projects, 10% attendance, 10% reflection paper, 20% in-class presentation, 10% class participation.

Hist 1905 Freshman Seminar: Magical Powers and Medical Wonders
A-F only, 3 credit(s);
Instructor: Gerbner, Katharine
Description: In this seminar, we will consider how the line between magic and medicine has changed over time. From accusations of witchcraft to proclamations of scientific breakthrough, we will examine the relationship between the supernatural and the natural during the age of European exploration and Enlightenment (roughly 1500-1800). Specific topics will include the origin of the smallpox vaccine, the use of tobacco for medical purposes, the transmission of healing practices from African slaves and Native Americans to European collectors, and the practice of voodoo. Throughout, we will ask how gender, class, and race have affected the construction of "magic" and "medicine."

Hist 1909W Freshman Seminar: Understanding New Zealand: Re-imagine Kiwi Culture
A-F only, 3 credit(s), max credits 6;Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Roberts, Evan
Hist 3000W Visions of the Past: Thematic Approaches to Understanding History: Slavery in the Past and Present
4 credit(s), max credits 8; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Pohlandt-McCormick, Helena
Description: The slave trade is not easily detached from slavery itself nor the slave ship from the middle passage and the plantation, nor the plantation from the modern ghetto and the shantytown, nor the Americas from Africa. This brutal chapter of world history has not simply ended but has helped create our present and our experience of modernity. This class will accept an ethics of global connection to consider the relationship of slavery to our histories and to consider the entangled relationship between Africa and the United States. We will learn how people in the Americas and in Africa struggled to resist, to remake, and to enforce slavery, focusing on the ethical questions involved and on the significance of slavery for our present moment.

Hist 3000W Visions of the Past: Thematic Approaches to Understanding History: Twin Cities History
4 credit(s), max credits 8; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Chang, David Anthony
Description: Twin Cities History surveys the dynamic history of the Minneapolis and St. Paul metropolitan region. The course incorporates lectures, discussions, and multimedia presentations that focus on the area's diverse populations and cultures and on the economic, political, and social developments that have shaped the modern metropolis. The course is also intended to offer students first-hand encounters with the Twin Cities past and present; scheduled activities include visits to museums, historic sites, and area landmarks. Specific historical topics include: the development of the region's milling economy; immigration, ethnicity, and refugees in the past and present; the experiences and activism of American Indians in the region; prohibition and crime in the 1920s and 1930s; the 1934 Minneapolis Trucker's Strike; suburban growth and mall culture; and Twin Cities’ music scenes in the late 20th century.
Style: 40% Lecture, 30% Discussion, 30% Field Trips.
Grading: 75% reports/papers, 25% attendance.

Hist 3000W Visions of the Past: Thematic Approaches to Understanding History: WWI - The Great War: A Global History
4 credit(s), max credits 8; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Mathieu, Saje M
Description: This new and exciting class takes a global approach to the examination of World War One's causes and consequences. We will look at how the war unfolded in Europe, Africa, and the Middle East. We will also explore the war's impact on North America and Australasia, areas drawn into the conflict because of their unique relationships with Britain and France. We will consider the special role played by the U.S. in restoring world peace and analyze the lasting social and political cleavages occasioned by the war. On this the eve of the World War One's 100th anniversary, we will get at the heart of how the war was fought and how it is remembered for all of its triumphs and tragedies.

Hist 3010W Historical Research Seminar: Medieval Mediterranean: Merchants and Pirates
A-F only, 3 credit(s), max credits 12, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Reyerson, Kathryn L
Description: This writing intensive course examines the Mediterranean world in the period 500-1500 as a vast geography where encounters of different cultures were common. Attention will be paid to economic relations, commercial techniques, piracy, cultural exchange, and the construction of identity, with the reexamination of paradigms such as the Pirenne thesis. A maritime culture united the inhabitants of the coasts. Where there was trade, there was piracy, and merchants and pirates will provide a particular focus as well as a vehicle for exploring cross-cultural interaction amongst the varied ethnicities and religious groups of the Mediterranean world. Recent scholarship on the Mediterranean has focused on connectivities, micro-environments, the uniqueness of islands, and the agricultural sphere in a geographic tradition that follows the path-breaking work of Fernand Braudel. This course will consider the urban and rural dimensions of the Mediterranean region. Finally, the political and military aspects of Mediterranean history will be examined. Through writing assignments that involve primary sources students should gain a deeper understanding of a region that continues to fascinate us today.

Hist 3010W Historical Research Seminar: The 1950s
A-F only, 3 credit(s), max credits 12, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Mathieu, Saje M
Description: The 1950s: A Decade of Conformity? is a new research seminar that explores how the 1950s, the decade
that saw America move from war to peace and from segregation to integration, radically transformed American society. This seminar calls into question common perceptions of the 1950s as a decade of conformity, arguing instead that the 1950s gave way to major civil, legal, and cultural shake ups, especially with respect to how we imagined gender, youth, and race. The course is designed as an intensive look at one decade in American history, with specific attention to how those years changed all aspects of American life, including the Cold War, the space program, urbanization patterns, leisure, politics, religion, and gender relations, and popular culture. Best of all, students will make direct use of primary sources when examining the Fifties. For example, when studying the early Civil Rights Movement and events at Little Rock, we will use photographs as our main analytical tool. Given that this class is conceived as a writing intensive seminar, students will be asked to write short critical analyses of the primary sources used in

Hist 3010W Historical Research Seminar: Jerusalem: Jews, Christians and Muslims
A-F only, 3 credit(s), max credits 12, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Schroeter, Daniel J
Description: This course examines the history of Jerusalem, shaped by the three major religions that consider the city sacred: Judaism, Christianity, and Islam. We examine the ways in which Jerusalem was developed since ancient times by each dominant religion, and how the contest between national groups in the nineteenth and twentieth centuries transformed the city in the modern period. Jerusalem has been considered sacred by millions of people who do not live there but who feel they have much at stake in the control of the city. This has been a major influence in the history of Jerusalem, shaping the daily lives of its residents. Jerusalem is unique because there is no city in the world that has been as contested for such a long period of time. Consequently, writings about Jerusalem offer many different perspectives. Interpretations of its history and the religious meaning of the city are usually controversial. Students will confront many different, contradictory, and often opposing viewpoints of Jerusalem in the writings of scholars, writers, travelers, residents, and religious and political leaders from ancient to modern times. Yet rather than privileging a particular interpretation over another, students will study how to analyze the evidence, and by so doing, achieve a better understanding of why Jerusalem has both been held sacred and fought over for 3,000 years.

Hist 3051 Ancient Civilization: Near East and Egypt
3 credit(s); Meets CLE req of Historical Perspectives
Instructor: von Dassow, Eva
Description: From peasants to pharaohs, potsherds to pyramids, promissory notes to poetry, the societies of the ancient Near East include humble and proud, mundane and transcendent, and everything in between. For they are us, just long ago and far away. What does the phrase "ancient Near East" denote? This oversize umbrella term encompasses the lands of Southwest Asia and Northeast Africa: Mesopotamia, Iran, Anatolia, the Levant, Egypt, and neighboring regions, from the Neolithic (beginning c. 9000 BCE) through the Hellenistic period (roughly the last three centuries BCE). Over these nine millennia, the peoples of the Near East developed agriculture, writing, and monotheism, to name only a few inventions of lasting significance. Their most famous achievements are the monuments of kings like Cheops, Midas, and Nebuchadnezzar, but these should not overshadow their less often celebrated social and cultural accomplishments, such as the articulation of systems of justice and ethics ancestral to our own. This survey course will highlight some of the most important technological developments, communities, and literary works of the ancient Near East, within the framework of a broad historical overview. The course will emphasize the construction of knowledge about past cultures on the basis of the texts and artifacts produced by those cultures. This course meets the LE Historical Perspectives core requirement.
Style: 75% Lecture, 25% Discussion.
Grading: 20% final exam, 40% reports/papers, 20% quizzes, 20% class participation.
Exam Format: Essay and identifications/definitions

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 3054 Egypt of the Pharaohs
3 credit(s);
Instructor: Evans, John Karl
Description: For a syllabus, please visit www.tc.umn.edu/~evans002

Hist 3067W Archaeology of Prehistoric Europe
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: Student may contact the instructor or department for information.
Hist 3101 Introduction to Medieval History
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Flynn, Christopher Patrick
Description: Student may contact the instructor or department for information.

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 3264 Imperial Russia: Formation and Expansion of the Russian Empire in the 18th and 19th Centuries
3 credit(s); Credit will not be granted if credit has been received for: HIST 5264;
Instructor: Stavrou, Theofanis G
Description: Student may contact the instructor or department for information.

Hist 3271 The Viking World: Story, History, and Archaeology
3 credit(s); Credit will not be granted if credit has been received for: HIST 5271;
Instructor: Mason, Austin Prosser Johnson
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 3401W Early Latin America to 1825
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: LAS 3401W; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Chambers, Sarah C
Description: In 1519, Spaniard Hernan Cortes entered the dazzling capital city of the Mexica (Aztec) empire; what happened next depends upon whose versions of events you read. European accounts emphasize his daring capture of emperor Moctezuma and his rapid domination of central Mexico by the use of his wits and superior technology. Native accounts reveal that the capture of Moctezuma backfired, leading to a lengthy and heroic defense of the island city. Regardless of the telling, such encounters and struggles set the stage for European rule of the Americas for the next three centuries. This course begins with pre-contact Native American societies, but primarily explores the historical processes of colonialism in Latin America (especially Mexico, Brazil and Peru) between 1492 and 1825. We will study both the economic, religious, and administrative systems put in place by the Europeans, and the varied responses of indigenous peasants, African slaves, racially-mixed town dwellers, and women. We will learn to analyze primary documents from the period (such as the competing accounts of the conquest of Mexico) and read life stories as well as historical narratives. All students register for a discussion section.
Style: 65% Lecture, 35% Discussion.
Grading: 20% final exam, 50% reports/papers, 15% quizzes, 15% class participation.
Exam Format: i.d. terms and short essays

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
Hist 3415 Migrations in Modern Global History
3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Gabaccia, Donna R
Description: Heated debates about the impact of immigration, emigration, and resident foreigners trouble every corner of today's world. The purpose of this course is to extend students' understanding of migration beyond the United States, and beyond the present, so that they can better assess and participate in these debates. The course begins with a fundamental and unresolved issue in early human history: if humans are "naturally" sedentary, how did they come to populate the world? The remainder of the course focuses on the past 500 years of human mobility. It acknowledges that the U.S. is regarded worldwide as the paradigmatic "nation of immigrants," but it focuses on the global systems or "networks of migration" in which North America has long been enmeshed. It compares the encounters of natives and newcomers (slave and free alike) in Europe's Atlantic empires and explores how new nations in North and South America sought to repopulate their countries with immigrants in the nineteenth century. It shows how the abolition of the slave trade and trade contributed to an earlier era of globalization by creating a market for migratory labor that linked Atlantic and Pacific economies. It compares immigrants living, working or fleeing as refugees to Latin America, Europe and Asia and explores the consequences of widespread restrictions on human mobility in the twentieth century. Throughout the course migrants' own stories about their lives supplement readings from history and the social sciences.
Style: 50% Lecture, 50% Discussion.
Grading: 75% reports/papers, 25% class participation.

Hist 3416 Imperialism and its Critics: Ethical Issues, Literary Representations
A-F only, 3 credit(s);Meets CLE req of Civic Life and Ethics; meets CLE req of Literature
Instructor: LORCIN, PATRICIA M.E.
Description: During the course of the semester this course will seek to answer the following questions: What ethical discourses form part of imperialist ideology? What ethical discourses form part of anti-imperialist activity? How successful is each group in subverting the ethical messages of the other? What role does literature play in promoting or subverting the ideologies and ethical issues related to imperialism and anti-imperialism? By examining different genres (novels, poems, memoirs, letters and orations) the class will explore the discursive power of literature and the ways in which it influenced or was influenced by social and political discourses and practices. It will explore how these different forms of communication served different personal, political, social and cultural agendas without forgetting their collective relevance. The focus on ethics will help to highlight the ambiguities and distortions that occur between ethical discourses and political, social and cultural practices. The concentration on different genres of literature will help students to understand that the boundaries between fiction and reality are often as blurred in memoirs and letters as they are in novels and poetry. The course is not about the imperialism as practiced by one particular power; nor is the approach strictly chronological. Rather it uses different episodes in the imperialist trajectory of a number of imperial nations to underscore themes that are relevant to the understanding of the ethical issues and literary representations connected to imperialism.

Hist 3417 Food in History
3 credit(s);Meets CLE req of Environment; meets CLE req of Historical Perspectives
Hist 3425 History of Modern Mexico
3 credit(s);Credit will not be granted if credit has been received for: CHIC 3425; Credit will not be granted if credit has been received for: GLOS 3245;
Instructor: McNamara, Patrick J
Description: Recent events in Mexico?the ongoing Zapatista rebellion in Mexico?³s southern state of Chiapas, the North American Free Trade Agreement, the election of Vicente Fox as president?signal an important shift in modern Mexico. And yet much of Mexican society and politics seem inextricably tied more to the past than to the future. In order to understand this anomaly, that is, in order to explain what we mean by ?modern? Mexico, this course will offer an in-depth analysis of 19th and 20th century Mexican history. The organization of the course assumes no prior background in Mexican history.
Although we will begin most sessions with a chronological discussion of relevant changes over time, emphasis will be placed upon certain themes and trends with respect to economic, social, and cultural development and change. We will be particularly interested in the patterns of conflict and negotiation that shaped Mexico?³s history and emphasis will be given throughout the course to the ways in which ?everyday people? participated in and influenced the political events of their times. In addition, we will focus on important regional, class, ethnic, and gender differences and identities that have figured prominently in Mexico?³s history, and to the politics of writing, telling, and sharing historical narratives. The course will rely on lectures, discussions, and films. We will read extensively in historical studies, primary documents, and Mexican literature.
Style: 60% Lecture, 5% Film/Video, 15% Discussion, 10% Small Group Activities.

Hist 3419 History of Capitalism: Uneven Development Since 1500
3 credit(s);Credit will not be granted if credit has been received for: GLOS 3219;
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 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 3426 Pirates of the Caribbean
  3 credit(s);
  Instructor: Pilcher, Jeffrey Michael
  Description: This course examines the history of early modern globalization through one of its most cosmopolitan actors, the pirate. With a geographical focus in the Caribbean basin, the class reaches out to explore networks of capitalism, migration, empire, and nascent nationalism. By studying global phenomena through marginalized participants—buccaneers, maroons, rebels, criminals, paupers, and privateers—we will seek alternate historical narratives on the emergence of the modern world.
  Style: 80% Lecture, 20% Discussion.
  Grading: 20% mid exam, 40% final exam, 40% reports/papers.
  Exam Format: essays

Hist 3432 Modern Africa in a Changing World
  3-4 credit(s), max credits 4, 1 completion allowed; 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.

Hist 3435 History of South Africa from 1910
  3 credit(s); Credit will not be granted if credit has been received for: AFRO 3205;
  Instructor: Pohlandt-McCormick, Helena
  Description: Student may contact the instructor or department for information.

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: Duenes, Michael
  Description: Student may contact the instructor or department for information.

Hist 3454 West African History: Early Times to 1800
  3 credit(s); Credit will not be granted if credit has been received for: AFRO 3001; Meets CLE req of Global Perspectives
  Instructor: Coifman, Victoria Bomba
  Description: Student may contact the instructor or department for information.

Hist 3456 Social and Intellectual Movements in the African Diaspora
  3 credit(s); Credit will not be granted if credit has been received for: AFRO 3120; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
  Instructor: Atkins, Keletso E
  Description: Student may contact the instructor or department for information.

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.

**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 3485 History of Southeast Asia**
Hist 3485 History of Southeast Asia
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Thao, Mai See
Description: This course provides a general introduction to Southeast Asia's past and present. The course is organized chronologically around three broad periods: 1) traditional states and societies (to 1800); 2) colonial transformations and indigenous responses (1800-1945); and 3) the emergence of nation-states: Indonesia, Thailand, and Philippines. Topics and themes include: the origins of indigenous states; religious conversion and practice; ethnicity, social organization, and gender relations; modern social and economic transformations; response to colonial domination; the development of "imagined communities" and nationalist and revolutionary movements; post-colonial societies and political systems; ethnic conflict and national integration; the impact of Cold War international relations; and U.S. involvement in the region. Grading: 2 midterms, 1 paper, final exam, discussions.
Style: 90% Lecture, 10% Discussion.
Exam Format: essay

Hist 3492 Hinduism
3 credit(s); Credit will not be granted if credit has been received for: ALL 3671;
Instructor: Skaria, Ajay
Description: Student may contact the instructor or department for information.

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 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: The tension, anxiety, and hatred between Islam and the West have historical, philosophical, and ideological roots. "Islam and the West" examines those roots and looks for common ground. The course is divided into three parts. Part one studies the principles and beliefs of Sunni and Shi'ite Muslims in the context of the pre-Islamic civilizations of the Mediterranean world. Part two studies the interaction between great medieval thinkers, concentrating on the fateful decision that each made: Muslim theologians set a spiritual course for Islam while Western theologians supported reason as well. Part three discusses the development of events in the Middle East from W.W.I to the present, which includes, among other things, the division of the Middle East into nation-states, Pan-Islamism, the rise of the Muslim Brotherhood, 9/11, and the Arab Spring.
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); Credit will not be granted if credit has been received for: RELS 3715; 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 3681 Irish History
- 3 credit(s);
- Instructor: Clark, Anna Kirsten
- Description: This course will be a survey of Irish history. We will begin with the Celtic past and the early conquest of Ireland, but most of the course will concentrate on the 17th-20th centuries, going up to the present. We will cover nationalist struggles, but also some aspects of Irish social history that are less well known, such as rebellious women in workhouses, the gaelic revival and folklore of fairies, sport, crime, and race. There will be some discussion in class, and some films. The readings will include Thomas Bartlett, A History of Ireland, Angela Bourke, The Burning of Bridget Cleary (nonfiction about a murder), Roddy Doyle, A Star Called Henry (novel) and short stories. There will be a short paper on the readings, a mid term and a final.

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: Blackler, Adam A
- Description: Student may contact the instructor or department for information.

Hist 3727 History of the Holocaust
- 3 credit(s); Credit will not be granted if credit has been received for: RELS 3521W;
- Instructor: Schmieder, Falko
- Description: Student may contact the instructor or department for information.

Hist 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.

Hist 3801 The People of Early America: 16th to 18th Centuries
- 3 credit(s);
- Instructor: STAFF
Hist 3822 United States in the 20th Century Since 1945
3 credit(s);
Instructor: Haker, Joseph Patrick
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. American politics and society in the postwar era, the diplomacy of the Cold War, the civil rights movement, the Vietnam War, cultural clashes in the 1960’s, Watergate, the conservative resurgence, and the end of the Cold War.
Style: Online
Grading: See attached syllabus

Hist 3802 "Sinners, Saints, and Savages": Religion in Early America
3 credit(s);Non-fr or instr consent Credit will not be granted if credit has been received for: RELS 3622;
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.

Hist 3821 United States in the 20th Century to 1945
3 credit(s);
Instructor: Lindquist, Malinda A
Description: Student may contact the instructor or department for information.

Hist 3837 Minnesota History
3 credit(s);Credit will not be granted if credit has been received for: AMST 3837;
Instructor: Stone, Paul Clois
Description: The long middle third of the 20th century was one in which Minnesota played a disproportionately powerful role in the political, social, and cultural life of the United States. It was a period that saw the last years of authors F. Scott Fitzgerald and Sinclair Lewis (the first American to win a Nobel Prize for Literature), and the early years of actor Jessica Lange and "the Artist" now, again, known as Prince, and the beginning of the era of the extremely influential local band The Replacements. The middle period of the middle century, the late Fifties and Sixties, was dominated by Minnesota journalists like Harrison Salisbury of the New York Times and Eric Severeid of CBS, NAACP leader Roy Wilkins, Senators Eugene McCarthy, Hubert Humphrey and Walter Mondale, Governor and U.S. Secretary of Agriculture Orville Freeman, U.S. Appellate Court Justice Gerald Heaney, former Governor and frequent Presidential candidate Harold Stassen and, especially, singer-songwriter Bob Dylan. McCarthy became a prominent Presidential candidate in 1968 and Mondale Vice President in 1977 and a Presidential candidate in 1984. However, if there is one figure whose career, ambitions and influence more than any others defines this middle portion of the century it is Hubert H. Humphrey, 1911 to 1978. A native of South Dakota who graduated from the University of Minnesota in 1939, Humphrey was both a teacher and a politician, ultimately Vice President between 1965 and 1969. By the time of his death from cancer in 1978 he had become both the...
Hist 3866 The Civil Rights and Black Power Movement, 1954-1984
3 credit(s); Credit will not be granted if credit has been received for: AFRO 3866; Instructor: Mayes, Keith A
Description: Student may contact the instructor or department for information.

Hist 3864 African American History, 1619-1865
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: AFRO 3864; Instructor: Lindquist, Malinda A
Description: Student may contact the instructor or department for information.

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: Chang, David Anthony
Description: American Indian history is far more than just the history of the loss of lands to the United States—which is the way we normally encounter it in our textbooks. It is the history of societies that were changing long before Columbus ever stumbled ashore in the Caribbean. It is the history of changing ideas about men and women, humans and spirits, people and animals. It is the story of work—whaling and the fur trade and farming and more. It is the story of grand confederacies of native nations, individual marriages, religious conflict, and intrigue, alliances, and warfare among scores of native societies, five empires, and two new settler nations. This is the rich and diverse history we will explore together in this class. Students should come prepared to use their intellectual talents, to draw on their knowledge of history, to exercise their reading and writing abilities, and to share their ideas.
Style: 50% Lecture, 10% Film/Video, 40% Discussion.
Grading: 20% mid exam, 25% final exam, 35% reports/papers, 20% class participation. Class participation includes discussion and also occasional map quizzes, etc.
Exam Format: Take-home essay format.

Hist 3875W Comparative Race and Ethnicity in US History
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: Onishi, Yuichiro
Description: This writing-intensive course will examine the racial history of modern America. The following question will serve as a guide throughout the semester: How did American Indians, African Americans, and immigrants from Europe, Asia, and Latin America struggle over identity, place, and meanings of these categories in society where racial hierarchy not only determined every aspect of how they lived, but also functioned as a lever to reconstitute a new nation and empire in the aftermath of the Civil War? We are interested in examining how these diverse groups experienced racialization not in the same way but unevenly especially in relation to each other. It is my hope that by the end of this semester, you will acquire a necessary race-conscious perspective to generate alternative historical interpretations, questions, and imaginations and find ways to reckon with America’s racist past. Lastly, one of the central objectives of this course is to make an inroad into original historical research and writing. Specifically, we will collectively unearth the little known racial history of Minnesota in the 1940s and 1950s at the intersection of Japanese American history, African American history, and American immigration history. This local history has potential to bring together not only the Japanese American resettlement experience during the wartime period, but also the formation of civil rights politics that was acquiring critical purchase around Minneapolis Mayor Hubert Humphrey and his allies at the grassroots. One of the requirements of this course is that you will spend at least 20 hours at Minnesota Historical Society (MHS) in Saint Paul to carry out archival research.

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: Hakim, Carol
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: Hakim, Carol
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
3 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HIST 3264;
Instructor: Stavrou, Theofanis G
Description: Student may contact the instructor or department for information.

Hist 5468 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.

Hist 5801 Seminar in Early American History
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 8801;
Instructor: Fischer, Kirsten
Description: Student may contact the instructor or department for information.

Hist 5890 Problems in American Indian History
A-F only, 3 credit(s); Advanced undergrad with instr consent or grad student Credit will not be granted if credit has been received for: AMIN 5890;
Instructor: O’Brien, Jean Maria
Description: Student may contact the instructor or department for information.

Hist 5900 Topics in European/Medieval History: Gender in Medieval/Early Modern Culture
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Watkins, John
Description: Student may contact the instructor or department for information.
Hist 5920 Topics in African History: Social/Intellectual Movements in African Diaspora  
3 credit(s), max credits 15, 5 completions allowed;  
Instructor: Atkins, Keletso E  
Description: Student may contact the instructor or department for information.

Hist 5932 The Production of Knowledge, Negotiating the Past, and the Writing of African Histories  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: AFRO 5932;  
Instructor: Isaacman, Allen F  
Description: Student may contact the instructor or department for information.

Hist 5950 Topics in Latin American History: History of Modern Mexico  
A-F only, 3 credit(s), max credits 15, 5 completions allowed;  
Instructor: McNamara, Patrick J  
Description: Student may contact the instructor or department for information.

Hist 5960 Topics in History: History, Power, and Pragmatism  
3 credit(s), max credits 16, 5 completions allowed;  
Instructor: Wolfe, Thomas C  
Description: Student may contact the instructor or department for information.

Hist 5960 Topics in History: Bourdieu, Latour, Agamben and Feminists  
3 credit(s), max credits 16, 5 completions allowed;  
Instructor: Mizuno, Hiromi  
Description: Student may contact the instructor or department for information.

Hist 5960 Topics in History: Public History: Guantanamo Public Memory Project  
3 credit(s), max credits 16, 5 completions allowed;  
Instructor: Murphy, Kevin P.  
Description: This course is both a graduate-level introduction to public history and an examination into the contentious history of the U.S. naval base at Guantanamo Bay, Cuba. It provides an introduction to the theory, methods, practice, and politics of public history. The course allows students to explore the possibilities and challenges of the production and dissemination of histories in nonacademic settings. Students will develop collaborative public projects that will be presented as part of The Guantanamo Public Memory Project Travelling Exhibit when it is installed at the Minnesota History Center in St. Paul in February 2014. These projects will either address the history of the U.S. Naval Station at Guantanamo or explore Minnesota connections to Guantanamo, broadly defined, including the meanings and impacts of post-9/11 security and anti-terrorism policies in Minnesota as well as the connections between U.S. immigration and citizenship policies and local refugee communities. The instructor will work with students to identify collaborative partners as well as technological resources and expertise. This is an interdisciplinary graduate public history course created to appeal to students in a wide range of programs. Upper-level undergraduates who demonstrate a commitment and capacity to handle the rigors of a graduate course may contact the instructor (kpmurphy@umn.edu) to request permission to enroll. The Guantanamo Public Memory Project, headquartered at Columbia University, is a collaboration involving eleven universities and across the United States. The University of Minnesota has participated in the project since 2012. More information can be found at: http://gitmomemory.org.

Hist 8015 Scope and Methods of Historical Studies  
A-F only, 3 credit(s);  
Instructor: Clark, Anna Kirsten  
Description: Student may contact the instructor or department for information.

Hist 8390 Research in American Indian History  
A-F only, 3 credit(s);  
Instructor: O'Brien, Jean Maria  
Description: Student may contact the instructor or department for information.

Hist 8801 Seminar in Early American History  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 5801;  
Instructor: Fischer, Kirsten  
Description: Student may contact the instructor or department for information.

Hist 8900 Topics in European/Medieval History: Gender in Medieval/Early Modern Culture
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
**Instructor:** Watkins, John
**Description:** Student may contact the instructor or department for information.

**Hist 8920 Topics in African History: Production of Knowledge, Negotiating the Past**
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
**Instructor:** Isaacman, Allen F
**Description:** Student may contact the instructor or department for information.

**Hist 8960 Topics in History: History, Power, and Pragmatism**
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
**Instructor:** Wolfe, Thomas C
**Description:** Student may contact the instructor or department for information.

**Hist 8960 Topics in History: Bourdieu, Latour, Agamben and Feminists**
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
**Instructor:** Mizuno, Hiromi
**Description:** Student may contact the instructor or department for information.

**Hist 8960 Topics in History: Public History: Guantanamo Public Memory Project**
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
**Instructor:** Murphy, Kevin P.
**Description:** This course is both a graduate-level introduction to public history and an examination into the contentious history of the U.S. naval base at Guantanamo Bay, Cuba. It provides an introduction to the theory, methods, practice, and politics of public history. The course allows students to explore the possibilities and challenges of the production and dissemination of histories in nonacademic settings. Students will develop collaborative public projects that will be presented as part of The Guantanamo Public Memory Project Travelling Exhibit when it is installed at the Minnesota History Center in St. Paul in February 2014. These projects will either address the history of the U.S. Naval Station at Guantanamo or explore Minnesota connections to Guantanamo, broadly defined, including the meanings and impacts of post-9/11 security and anti-terrorism policies in Minnesota as well as the connections between US immigration and citizenship policies and local refugee communities. The instructor will work with students to identify collaborative partners as well as technological resources and expertise. This is an interdisciplinary graduate public history course created to appeal to students in a wide range of programs. Upper-level undergraduates who demonstrate a commitment and capacity to handle the rigors of a graduate course may contact the instructor (kpmurphy@umn.edu) to request permission to enroll. The Guantanamo Public Memory Project, headquartered at Columbia University, is a collaboration involving eleven universities and across the United States. The University of Minnesota has participated in the project since 2012. More information can be found at: [http://gitmomemory.org](http://gitmomemory.org).

**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 3040 Human Health, Disease, and the Environment in History**
3 credit(s); Meets CLE req of Historical Perspectives
**Instructor:** Gunn, Jennifer
**Description:** Introduction to changing relationship of human health and the environment. Ways in which human-induced
environmental changes have altered our experiences with disease and our prospects for health. Four in-class 20-minute essays in lieu of a midterm (no final); research paper (5-7 pages plus two intermediate stages in the project) and group research presentation; book review (3 pages), and library skills "scavenger hunt." Although the class will have about 45 students, it is conducted as a seminar as much as possible, with class discussions and small group work.

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: Kernahan, Peter
Description: Student may contact the instructor or department for information.

HMed 8001 Foundations in the History of Early Medicine
A-F only, 3 credit(s);
Instructor: Shackelford, Jole Richard
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: Borrello, Mark E
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

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: Alexander, Jennifer Karns
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 in small groups and in discussion sections. 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, 5% Film/Video, 35% Discussion.
Grading: 15% mid exam, 20% final exam, 25% reports/papers, 5% in-class presentation, 25% other evaluation. NOTE: two midterm exams, worth 15% each; 25% of grade based on discussion section
Exam Format: Essay exams.

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: Thomas, Mary Margaret
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:** 60% Lecture, 25% Film/Video, 15% Discussion.

**Grading:** 15% mid exam, 20% final exam, 30% reports/papers, 20% additional semester exams, 5% attendance, 10% class participation. 1715 students will do three papers, 3-5 pages each. 3715 students will do one 12-15 page research paper, with three components.

**Exam Format:** Short identification, essay.

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**HSci 1814 Revolutions in Science: The Babylonians to Newton**

3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 3814; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives

**Instructor:** Boantza, Victor Dan

**Description:** This first half of a two-semester undergraduate course is devoted to the history of science from antiquity through the Scientific Revolution. The development of various branches of science like astronomy, physics, chemistry, and biology, as well as the changing nature of science and its methods are placed in their cultural context, especially in relation to philosophy, religion, technology, and social structures. The first part of the course covers the foundations of Western science in the ancient world (Babylonian, Egyptian, Greek, and Roman civilizations), with a focus on Greek theories of the cosmos and natural phenomena. The second part examines the migration and reformulation of these views during the middle ages and the Renaissance, culminating in the Scientific Revolution of sixteenth and seventeenth centuries. Aristotle, Copernicus, Galileo, and Newton are among the scientists studied. The course does not require background in history or science. Students are expected to read about 40-50 pages weekly (on average), attend lectures and engage in discussion sections. Grading will be based on a mid-term exam (20%), a final exam (40%), and active participation in discussion sections (10%). In addition to the two in-class exams, students are assigned two take-home essays (around 3-4 pages long; each 15%).

**Grading:** 20% mid exam, 40% final exam, 30% reports/papers, 10% attendance.

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**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 Civic Life and Ethics; 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'll 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 biology and the broader cultural, economic and political contexts.

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

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**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.

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**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:** Hawley, Elizabeth Haven
HSci 3401 Ethics in Science and Technology
Description: Description: Science and technology were defining elements in twentieth-century American life in the United States and indeed in much of the world. Using case studies involving such topics as eugenics as well as comparative studies of technology in the Soviet Union and the United States in the 1930s, and an analysis of post-war attitudes toward atomic and other sciences, we will explore some of the ways in which science has influenced American culture and the reciprocal kinds of expectations that have pushed forward and also reacted against some aspects of science and technology. Most units of the course will have on-line assignments, short readings, film and slide presentations and one-page response papers. These will be a mid-term and final examination. The class members will meet together for lectures, films, and similar activities, with one smaller discussion group meeting at the end of each week. Evaluation will take into consideration class and group participation, written assignments, and the examinations.
Style: 57% Lecture, 33% Discussion. Small group discussions
Exam Format: Essay and short answer

HSci 3714 Technology and Civilization: Stone Tools to Steam Engines
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, concluding with the birth of the steam engine. 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 in small groups and in discussion sections. 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 of its development and use? The course is designed for undergraduates from a variety of backgrounds, including engineering, literature, history, business, and the sciences. Those enrolled in HSci 3714 will also write a research paper on the history of a technology of their choice.
Style: 55% Lecture, 35% Discussion.
Grading: 25% mid exam, 20% final exam, 30% reports/papers, 25% class participation. note: two midsemester exams
Exam Format: short answer and short essay

HSci 3715 Technology and Civilization: Waterwheels to the Web
Description: HSCI 3715 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: 60% Lecture, 25% Film/Video, 15% Discussion.
Grading: 15% mid exam, 20% final exam, 30% reports/papers, 20% additional semester exams, 5% attendance, 10% class participation. 1715 students will do three 3-5 page papers over the course of the semester. 3715 students will do one larger research project, 12-15 pages, that has three components.
Exam Format: Short identification, essay.

HSci 3814 Revolutions in Science: The Babylonians to Newton
Description: This first half of a two-semester undergraduate course is devoted to the history of science from antiquity
through the Scientific Revolution. The development of various branches of science like astronomy, physics, chemistry, and biology, as well as the changing nature of science and its methods are placed in their cultural context, especially in relation to philosophy, religion, technology, and social structures. The first part of the course covers the foundations of Western science in the ancient world (Babylonian, Egyptian, Greek, and Roman civilizations), with a focus on Greek theories of the cosmos and natural phenomena. The second part examines the migration and reformulation of these views during the middle ages and the Renaissance, culminating in the Scientific Revolution of sixteenth and seventeenth centuries. Aristotle, Copernicus, Galileo, and Newton are among the scientists studied. The course does not require background in history or science. Students are expected to read about 40-50 pages weekly (on average), attend lectures and engage in discussion sections. Grading will be based on a mid-term exam (15%), a final exam (35%), and active participation in discussion sections (10%). In addition to the two in-class exams, students are assigned two take-home essays (around 3-4 pages long; each 10%) and a final paper (around 7-10 pages long; 20%).

**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; Meets CLE req of Civic Life and Ethics**
- **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 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 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:** Buchanan, Nicholas Seong Chul.
- **Description:** Student may contact the instructor or department for information.

**HSci 8112 Historiography of Science, Technology, and Medicine**

- **A-F only, 3 credit(s);**
- **Instructor:** Borrello, Mark E
- **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:** Many observers have been stunned by the rise of religious fundamentalisms in highly advanced cultures, because people often assume that advanced scientific and technological cultures are secular. This seminar asks whether this assumption is true, by asking how science, technology, and religion have interacted, empirically and historically. Scholars have focused on science and religion for generations, but very few have investigated technology and religion, and yet technology seems to be one thing that crosses cultural boundaries with ease. The seminar opens with an analysis of the concept of secularity, and then asks if we can identify secular societies in a time of globalization, by surveying interactions between science and technology and the great world religions. We read work by Charles Taylor on secular
societies, George Saliba on Islam and European science and technology, Noah Efron on Judaism and science, and Donald Lopez on Buddhism, science, and epistemology. The literature is most developed on science and Christianity, and we read the debate between Richard Dawkins and David Bentley Hart on the role of Christianity in scientific development, recent reappraisals by a variety of scholars of perennial myths of warfare between Christianity and science (such as Galileo?s dispute with the Catholic Church), and Peter Harrison on the role of theology in early scientific practices. We then turn to David F. Noble?s study of Christianity and technology, and ask why scholars have paid so little attention to religion and technology. The seminar concentrates on the early modern and the late modern/industrial periods, and readings will be tailored to students? interests in the themes of the course.

**Style:** 80% Discussion, 20% Student Presentation. This seminar is devoted to discussions of readings. Students will take turns introducing the readings and leading discussion.

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

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**Hmong 1001 Introduction to Hmong Language**

5 credit(s); Credit will not be granted if credit has been received for: HMNG 4101;

**Instructor:** Vang, Bee

**Description:** DESCRIPTION: This course is for students with no prior and/or very limited language/literacy background in the Hmong language. This course will set the foundation of learning the Hmong language for any student with no prior and/or very limited language/literacy background in Hmong. The course emphasizes the individual learning styles and preferences of each student. Instruction is oriented towards using best practice methods to help students learn and retain information in order to use the language effectively. All the aspects of linguistic performance: speaking, reading, writing and listening would be given roughly equal consideration. Using essentially a communicative-interactional teaching methodology, supplemented with appropriate grammatical details, the students will be, systematically and incrementally, introduced to materials that will enable them to acquire cultural and linguistic literacy about Southeast Asia, the Hmong community in particular. **OBJECTIVES** It is expected that the students understand all materials before coming to class to fully participate in the session. In this class students will, 1) be introduced to basic reading, writing, listening, and speaking skills using the Hmong Romanized Phonetic Alphabet (RPA) 2) have ample opportunities to strengthen one?s ability to communicate and negotiate meanings in everyday Hmong at the inter-personal level in the classroom, at home, and/or out in the community; and, 3) be able to increase knowledge of vocabularies and work on fluency through select topics. The course will be taught utilizing lectures, reading and writing practice, projects, basic dialogues, group discussions, and class exercises as well as online practice sessions. **SOME OF THE TOPICS COVERED IN THIS SEMESTER:** 1. A brief introduction to the history of Hmong RPA 2. Alphabets and linguistic specifications 3. Grammar rules, parts of speech and syntax structures 4. Greetings and common phrases 5. Vocabularies of the self, school, and the workplace

**Style:** This is a class that requires participation in discussions and class activities in order to learn. A good percentage of the class will be used on practice and drills.

**Grading:** 20% mid exam, 20% final exam, 15% quizzes, 15% written homework, 15% attendance, 15% in-class presentation.

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**Hmong 1011 Beginning Hmong**

5 credit(s); Credit will not be granted if credit has been received for: HMNG 4001;

**Instructor:** Vang, Bee

**Description:** DESCRIPTION: This course is for students with a beginning to low intermediate level of spoken Hmong, as class will start with lectures in Hmong. It will set the foundation as well as further the fluency of students? Hmong language skills. The course emphasizes the individual learning styles and preferences of each student. Instruction is oriented towards using best practice methods to help students learn and retain information in order to use the language effectively. All the aspects of linguistic performance: speaking, reading, writing and listening would be given roughly equal consideration. Using essentially a communicative-interactional teaching methodology, supplemented with appropriate grammatical details, the students will be, systematically and incrementally, introduced to materials that will enable them to acquire cultural and linguistic literacy about Southeast Asia, the Hmong community in particular. **OBJECTIVES** It is expected that the students understand all materials before coming to class to fully participate in the session. In this class students will, 1) be introduced to basic reading, writing, listening, and speaking skills using the Hmong Romanized Phonetic Alphabet (RPA) 2) have ample opportunities to strengthen one?s ability to communicate and negotiate meanings in everyday Hmong at the inter-personal level in the classroom, at home, and/or out in the community; and, 3) be able to increase knowledge of vocabularies and work on fluency through select topics. The course will be taught utilizing lectures, reading and writing practice, projects, basic dialogues, group discussions, and class exercises as well as online practice sessions. **SOME OF THE TOPICS COVERED IN THIS SEMESTER:** 1. A brief introduction to the history of Hmong RPA 2. Alphabets and linguistic specifications 3. Grammar rules, parts of speech and syntax structures 4. Common classifiers, verbs, nouns and adjectives 5. Topics to the self

**Style:** Class will be taught with lectures and many in-class group participation as well as discussions utilizing the appropriate vocabularies and themes.

**Grading:** 20% mid exam, 20% final exam, 15% quizzes, 15% written homework, 15% attendance, 15% in-class presentation.
### 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 offered on Monday and Wednesday. The contents of Beginning Hmong 1011 include 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, 25% 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
- **5 credit(s):** Ability in basic spoken Hmong
- **Credit will not be granted if credit has been received for:** HMNG 4005;
- **Instructor:** LeYang, Maxwell
- **Description:** Student may contact the instructor or department for information.

### HMNG 3021 Intermediate Hmong
- **5 credit(s):** 1002 or 1012 or 1015 or instr consent
- **Credit will not be granted if credit has been received for:** HMNG 4003;
- **Instructor:** Vang, Bee
- **Description:** DESCRIPTION: This course is designed for students who have already taken the Beginning Hmong courses (HMNG 1011 and HMNG 1012, 1015, and/or 1002). It is expected that the student understand all materials before coming to class to fully participate in the session. The main objectives of this course are to 1) reinforce basic reading, writing, and speaking using the Hmong Romanized Phonetic Alphabet (RPA); 2) strengthen and enhance the student?s ability to communicate and negotiate meanings in basic White Hmong at the inter-personal level in the classroom, school settings and in the community; and, 3) increase student?s vocabulary and fluency through select topics. The course will be taught utilizing lectures, pronunciation, reading and writing practice, projects, basic dialogues, group discussions, and class exercises. COURSE OBJECTIVES: Upon completion of this course, students should be able to: 1. Handle successfully a variety of uncomplicated, basic, and communicative tasks in social situations. 2. Be able to read and write consistently with increased understanding of connected texts dealing with a variety of basic and social needs. 3. Be able to identify key elements of Hmong culture pertaining to the select topics. 4. Have a better understanding of the usage of Hmong grammatical rules.
- **Style:** The Intermediate levels classes will involve many discussions and hands-on practice utilizing appropriate vocabularies and themes studied.
- **Grading:** 20% mid exam, 20% final exam, 15% quizzes, 15% written homework, 15% attendance, 15% in-class presentation.

### HMNG 3021 Intermediate Hmong
- **5 credit(s):** 1002 or 1012 or 1015 or instr consent
- **Credit will not be granted if credit has been received for:** HMNG 4003;
- **Instructor:** LeYang, Maxwell
- **Description:** Student may contact the instructor or department for information.

### HMNG 3031 Advanced Hmong
- **4 credit(s):** 3022 or equiv or instr consent
- **Credit will not be granted if credit has been received for:** HMNG 4007;
- **Instructor:** LeYang, Maxwell
- **Description:** Student may contact the instructor or department for information.

### HMNG 3290 Hmong Language Teaching Tutorial
- **S-N only, 1 credit(s), max credits 2;**
- **Instructor:** Vang, Bee
- **Description:** Student may contact the instructor or department for information.

### HMNG 4001 Beginning Hmong
- **3 credit(s):** Grad student
- **Credit will not be granted if credit has been received for:** HMNG 1011;
Hmng 4001 Beginning Hmong

3 credit(s); Grad student
Credit will not be granted if credit has been received for: HMNG 1011;
Instructor: LeYang, Maxwell
Description: DESCRIPTION: This course is for students with a beginning to low intermediate level of spoken Hmong, as class will start with lectures in Hmong. It will set the foundation as well as further the fluency of students' Hmong language skills. The course emphasizes the individual learning styles and preferences of each student. Instruction is oriented towards using best practice methods to help students learn and retain information in order to use the language effectively. All the aspects of linguistic performance: speaking, reading, writing and listening would be given roughly equal consideration. Using essentially a communicative-interactional teaching methodology, supplemented with appropriate grammatical details, the students will be, systematically and incrementally, introduced to materials that will enable them to acquire cultural and linguistic literacy about Southeast Asia, the Hmong community in particular. OBJECTIVES It is expected that the students understand all materials before coming to class to fully participate in the session. In this class students will, 1) be introduced to basic reading, writing, listening, and speaking skills using the Hmong Romanized Phonetic Alphabet (RPA) 2) have ample opportunities to strengthen one's ability to communicate and negotiate meanings in everyday Hmong at the inter-personal level in the classroom, at home, and/or out in the community; and, 3) be able to increase knowledge of vocabularies and work on fluency through select topics. The course will be taught utilizing lectures, reading and writing practice, projects, basic dialogues, group discussions, and class exercises as well as online practice sessions. SOME OF THE TOPICS COVERED IN THIS SEMESTER: 1. A brief introduction to the history of Hmong RPA 2. Alphabets and linguistic specifications 3. Grammar rules, parts of speech and syntax structures 4. Common classifiers, verbs, nouns and adjectives 5. Topics to the self
Style: Class will be taught with lectures and many in-class group participation as well as discussions utilizing the appropriate vocabularies and themes.
Grading: 20% mid exam, 20% final exam, 15% quizzes, 15% written homework, 15% attendance, 15% in-class presentation.

Hmng 4003 Intermediate Hmong

3 credit(s);4002 Concurrent registration is required (or allowed) in grad student
Credit will not be granted if credit has been received for: HMNG 3021;
Instructor: Vang,Bee
Description: DESCRIPTION: This course is designed for students who have already taken the Beginning Hmong courses (HMNG 1011 and HMNG 1012, 1015, and/or 1002). It is expected that the student understand all materials before coming to class to fully participate in the session. The main objectives of this course are to 1) reinforce basic reading, writing, and speaking using the Hmong Romanized Phonetic Alphabet (RPA); 2) strengthen and enhance the student's ability to communicate and negotiate meanings in basic White Hmong at the inter-personal level in the classroom, school settings and in the community; and, 3) increase student's vocabulary and fluency through select topics. The course will be taught utilizing lectures, pronunciation, reading and writing practice, projects, basic dialogues, group discussions, and class exercises. COURSE OBJECTIVES: Upon completion of this course, students should be able to: 1. Handle successfully a variety of uncomplicated, basic, and communicative tasks in social situations. 2. Be able to read and write consistently with increased understanding of connected texts dealing with a variety of basic and social needs. 3. Be able to identify key elements of Hmong culture pertaining to the select topics. 4. Have a better understanding of the usage of Hmong grammatical rules.
**Hmng 4003 Intermediate Hmong**

3 credit(s); Concurrent registration is required (or allowed) in grad student
Credit will not be granted if credit has been received for: HMNG 3021;
Instructor: Le Yang, Maxwell
Description: This course is designed for students who have already taken the Beginning Hmong courses (HMNG 1011 and HMNG 1012, 1015, and/or 1002). It is expected that the student understand all materials before coming to class to fully participate in the session. The main objectives of this course are to 1) reinforce basic reading, writing, and speaking using the Hmong Romanized Phonetic Alphabet (RPA); 2) strengthen and enhance the student’s ability to communicate and negotiate meanings in basic White Hmong at the inter-personal level in the classroom, school settings and in the community; and, 3) increase student’s vocabulary and fluency through select topics. The course will be taught utilizing lectures, pronunciation, reading and writing practice, projects, basic dialogues, group discussions, and class exercises. COURSE OBJECTIVES: Upon completion of this course, students should be able to: 1. Handle successfully a variety of uncomplicated, basic, and communicative tasks in social situations. 2. Be able to read and write consistently with increased understanding of connected texts dealing with a variety of basic and social needs. 3. Be able to identify key elements of Hmong culture pertaining to the select topics. 4. Have a better understanding of the usage of Hmong grammatical rules.

**Hmng 4005 Accelerated Beginning Hmong**

3 credit(s); basic spoken Hmong, graduate or professional student
Credit will not be granted if credit has been received for: HMNG 1015;
Instructor: Le Yang, Maxwell
Description: Student may contact the instructor or department for information.

**Hmng 4101 Introduction to Hmong Language**

3 credit(s); Credit will not be granted if credit has been received for: HMNG 1001;
Instructor: Vang, Bee
Description: Student may contact the instructor or department for information.

**Honors Seminar 20 Nicholson Hall**

**HSem 2037V Honors Seminar: Under Fire: War on the Western Front**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: LORCIN PATRICIA M.E.
Description: 2014 is the centenary of the beginning of the First World War, one of the two most devastating wars in European history. In 2009, just before he died, Harry Patch, the last surviving veteran of WWI, broke his decades long silence on his experiences during the war to declare that the war had been ?legalized mass slaughter?. When he died, his body was given a funeral with full military honors, which was watched by millions on television. Why did this war happen when it did and why, nearly one hundred years later, did a veteran, about whom virtually nothing was known beyond his longevity, qualify for the honors that were usually afforded generals and statesmen? This course will look at the history, literature and ethics of the war that was known in French as the ?Der de la Der? (the last of the last) and which marked over three generations of Europeans, creating a legacy that was incorporated into the national identity of the nations taking part.

**HSem 2053H Honors Seminar: Psychology of the Paranormal**

A-F only, 3 credit(s), max credits 3, 1 completion allowed;
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.
**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:** 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 non-science majors, but a background in high school chemistry is required.  

**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. 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, human 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 creative and workable solutions might be built. We provide techniques for discovering, exercising, and improving students’ individual and group-level creativity.  
* **Style:** 5% Lecture, 30% Discussion, 50% Small Group Activities, 10% Student Presentation, 5% Guest Speakers.

**HSem 2413H Honors Seminar: Ideas, Insights, and Innovation**  
* A-F only, 3 credit(s), max credits 3, 1 completion allowed;  
* Instructor: Sapienza, Harry Jack  
* **Description:** This course is designed to introduce students to techniques for discovering everyday problems and fashioning potential solutions to those problems. 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, human 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 creative and workable solutions might be built. We provide techniques for discovering, exercising, and improving students’ individual and group-level creativity.  
* **Style:** 5% Lecture, 30% Discussion, 50% Small Group Activities, 10% Student Presentation, 5% Guest Speakers.

**HSem 2503H Honors Seminar: The Search for Life in the Universe**  
* A-F only, 2 credit(s), max credits 3, 1 completion allowed;  
* Instructor: Jones, Terry J  
* **Description:** Is there life elsewhere in the Universe? What should we look for and how can we find it? If we find primitive life outside the confines of the Earth, what are the implications? If we discover intelligent life, how will society respond, and what are the long-term implications for humanity?  
* **Style:** Weekly postings based on a weekly reading or project. One, thirty minute, in class presentation on a relevant topic researched by the student during the last weeks of the course. No exams.

**HSem 2513H Honors Seminar: NANO! Small Science, Big Deal**  
* A-F only, 3 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.  
* **Style:** Classes will be a mixture of discussions, on-campus field trips, hands-on laboratory activities, and in-class projects.
HSem 2529H Honors Seminar: "Elementary, Dr. Einstein": How Scientists Reason  
A-F only, 3 credit(s), max credits 6;  
Instructor: Janssen, Michel  
Description: How do scientists figure things out? How can they be confident they got it right? In this seminar we will be looking at some episodes from the history of science (involving such luminaries as Copernicus, Kepler, Newton, Darwin, and Einstein) to get a sense of what form answers to such questions might take. Concretely, we will try to model the reasoning employed by our protagonists using two approaches to understanding scientific inference popular among philosophers of science. They are known as IBE and Bayesianism, respectively. The acronym IBE stands for Inference to the Best Explanation and is roughly an extension of everyday reasoning from observed effects to suspected causes. This is the kind of reasoning behind Sherlock Holmes’ famous “deductions?. Bayesianism, named after Thomas Bayes, who first formulated the simple rule in probability theory on which the approach is based, is a more formal way of capturing inferences from effects to causes. In addition to material for various case studies (including continental drift, dinosaur extinction, and cosmic inflation), we will read (parts of) a popular history of Bayesianism, Nate Silver’s The signal and the noise, and two philosophy of science books, one on IBE and one on Bayesianism.

HSem 2717H Honors Seminar: Vaccines and Society  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
Instructor: Hoggquist, Kristin Ann  
Description: Do vaccines cause autism? Is it true that the government colluded with Big Pharma to hide the risks of vaccine preservatives from the public? The idea that vaccines are harmful seems to be in the news everywhere these days. In this seminar we will explore the scientific, legal, financial, and philosophical issues around vaccination. Students will learn sufficient basic immunology to understand the general mechanisms by which vaccines protect against disease. We’ll read about and debate current controversies about vaccination, including how their safety is evaluated and whether vaccines should be mandatory. We’ll discuss new vaccines on the horizon and what other diseases have resisted vaccine efforts and why. Finally, we’ll consider the impact of vaccines on cancer. Through guest lectures, debate, student presentations, and essay writing, we will learn to make sense of, evaluate, and respond to present and future changes in this important public health issue.
Style: 30% Discussion, 10% Small Group Activities, 30% Student Presentation, 30% Guest Speakers.  
Grading: 15% final exam, 20% quizzes, 10% written homework, 25% in-class presentation, 20% class participation.

HSem 2801H Honors Seminar: Think like a Lawyer: The Art & Adventure of Torts  
A-F only, 3 credit(s); max credits 6;  
Instructor: Ha’Eri, Bobak F T  
Description: This class is awesome; and by awesome, I mean totally sweet. Why? Law is the foundation of modern society. The ability to understand our legal system is invaluable in any profession, ranging from business and health to science or art. 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. Are you ready for that kind of knowledge? Of course you are! Join the adventure! As a focus, we will be grounding ourselves in torts, a fundamental area of legal education that covers the civil wrongs. 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 (with numerous tangents!). 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. Bobak Ha’Eri 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: 11% Lecture, 3% Film/Video, 79% Discussion, 7% Guest Speakers.  
Grading: 60% reports/papers, 40% class participation.

HSem 3017V Honors Seminar: Reading and Writing in the Ancient World  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: von Dassow, Eva  
Description: Why was writing invented, and how? What difference did it make to society once it was invented? Who learned to read and write in antiquity, and what did they write? When people learned a writing system, did they write in their own language, or did they learn to write in the language of the people who invented the writing system? And how did modern scholars figure out how to read what people once wrote in long-forgotten, extinct writing systems? These are among the questions to be explored in this honors seminar. We will focus on writing systems developed in and around the ancient Near East: cuneiform in Mesopotamia and Iran, hieroglyphics in Egypt, and the alphabet in the Levant, plus other scripts such as Linear A and B, Anatolian hieroglyphics, Old Persian cuneiform, and Meroitic. In the process, we will discuss how cultures influenced each other in developing these various writing systems, and how people and states used particular scripts and languages for either in-group or international communication. The class will also consider writing systems developed in other parts of the world in antiquity: the Indus Valley, China, and Mesoamerica. There will be opportunities to examine ancient inscriptions first-hand.
HSem 3323H Honors Seminar: Chess and 21st Century Skills: Cognition and the I
A-F only, 3 credit(s), max credits 6;
Instructor: Friell, Joshua Craig
Description: This seminar will introduce students to the international world of chess and its relation to the development and practice of 21st century reasoning skills including skills involved in critical thinking, problem solving, decision making, and creative thinking. Chess has over 500 million advocates worldwide and the Internet is a primary means that binds this worldwide community together. Chess is a context that permits the study and practice of practically all higher order 21st Century thinking skills in an integrated manner. Chess is also a complex game that is extremely compatible with the Internet and software. No prior knowledge of chess is required in this seminar. The instructor will gently introduce students to the game of chess, its notational system, its worldwide community, important Internet sites, and its connections to 21st Century reasoning skills, human cognition, and cognitive science. Students will be asked to evaluate their own games and design and implement modest research projects involving chess software available to microcomputers and iPads. This seminar is highly inter-disciplinary as it will draw on psychology, computer science, cognitive science, education, sociology, history, and the study of contemporary culture. Honors students will likely find this seminar to be highly stimulating and interesting.
Style: 50% Discussion, 50% Small Group Activities.

HSem 3719H Honors Seminar: Orthopedic medicine, arthritis, & sports injuries
A-F only, 3 credit(s), max credits 3, 1 completion allowed;
Instructor: Bert, Jack Michael
Description: "Orthopedics, arthritis and sports injuries" is an introduction to the relationship of orthopedic medicine, sports related injuries and the etiology and treatment of arthritis. Active participation between the instructor and students will not only be encouraged but be expected.

HSem 3801H Honors Seminar: China: Law, History, and Culture
A-F only, 3 credit(s), max credits 6; Meets CLE req of Global Perspectives
Instructor: Wang, Chang
Description: This course will provide a comprehensive overview of the law, in its jurisprudential and historical contexts, in 20th and 21st-century China. It will introduce American law students to the distinctive paradigms and discourse patterns of law in China to foster comparative legal analysis. The course initially will focus upon Chinese legal history. Particular attention will be paid to traditional Chinese views on the role of law in society, to the legal aspects of early Sino-Western interaction, and to efforts to introduce foreign models of law into China. The second part of the course will focus on substantive laws in the People's Republic of China today. The course will conclude by examining current issues from both sides and China's argument for the ?Beijing Consensus? ? essentially a new type of capitalism without the Western style rule of law. The classes will progress by way of interactive discussion and critical readings of historical documentation and legal texts. Students will be given an opportunity to look at China's place in the world, to question general assumptions of the universal rule of law, to describe dominant legal themes and their development in different cultures, and to compare and contrast legal conventions and beliefs of different cultures. This seminar will help students to develop a better understanding of the legal system, history, and culture of China from a comparative perspective.

Horticultural Science 305 Alderman Hall

Hort 1001 Plant Propagation
4 credit(s); Meets CLE req of Biological Sciences
Instructor: Friell, Joshua Craig
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 may 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 online through the use of text, audio, and video hosted on Moodle that you will work through interactively. 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 digital camera capable of taking clearly focused close-ups (most times a simple point-and-shoot camera or cell phone can suffice), and the ability to upload those pictures to Moodle forums. You will use the camera for your weekly homework. The most important thing to remember about the hybrid class format is that it requires the self-discipline and motivation to set aside time each week to work through the online content just as if you were going to a conventional lecture. By doing so, you will find that the ability to revisit material at your convenience affords you the opportunity to explore concepts more thoroughly and gain a deeper understanding of the material in a timeframe comparable to conventional lectures. Labs are taught in a face-to-face format on the St. Paul campus in a state-of-the-art greenhouse facility. And, yes?you get to keep the plants you propagate. The Wednesday night sessions, which are scheduled from 5:10-6:30pm, are face-to-face and are held on the St. Paul campus. During that time we'll have the chance to introduce and explore the topics addressed in that week's online content as well as discuss questions students might
have about the previous week's material in a supportive and collaborative learning environment. You should keep in mind when planning your class schedule that the Wednesday night sessions are also when the class exams will be scheduled. **Style:** 30% Laboratory, 10% Demonstration, 60% Web Based. Lectures delivered online with mp3 lecture companion podcasts **Grading:** 37% mid exam, 8% final exam, 25% reports/papers, 10% quizzes, 10% written homework, 10% laboratory evaluation. These percentages are approximations and are intended to assist with registration planning **Exam Format:** Multiple choice, matching, draw and label diagrams, short answer, brief essay. Final will be comprehensive.

**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:** Luby, James Joseph

**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 course is taught in part with 20 to 50 minute online lectures (Adobe Presenter) format. Usually 2 or 3 of these are covered each week. The class also meets one evening 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:** 15% Lecture, 15% Discussion, 10% Small Group Activities, 5% Field Trips, 10% Guest Speakers, 40% Web Based.

**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 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:** Online  
**Grading:** 5% in-class presentation, 10% class participation, 10% problem solving. See attached syllabus

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  
3 credit(s); Meets CLE req of Environment  
**Instructor:** Meyer, Mary Hockenberry  
**Description:** Student may contact the instructor or department for information.

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 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 4062 Turfgrass Weed and Disease Science  
A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;  
**Instructor:** Watkins, Eric
Description: The purpose of this course is to familiarize students with turfgrass weed and disease problems and provide them with the knowledge to deal with these problems using an integrated approach. Students will learn the biology, identifying features, and management strategies for several important turfgrass diseases and weeds. Students will also learn how to apply IPM principles to turfgrass weed and disease problems.

**Style:** 25% Lecture, 25% Discussion, 50% Laboratory.

**Grading:** 15% mid exam, 15% final exam, 25% reports/papers, 10% quizzes, 5% in-class presentation, 5% class participation, 20% laboratory evaluation, 5% problem solving.

**Exam Format:** short answer, essay

**Hort 4062 Turfgrass Weed and Disease Science**
- A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;
- Instructor: Watkins, Eric
- **Description:** Student may contact the instructor or department for information.

**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**
- A-F only, 2 credit(s); Meets CLE req of Writing Intensive
- Instructor: Watkins, Eric
- **Description:** Student may contact the instructor or department for information.

**Hort 4141W Plant Production I**
- A-F only, 4 credit(s); Meets CLE req of Writing Intensive
- Instructor: Erwin, John E
- **Description:** Student may contact the instructor or department for information.

**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: Yue, Chengyan
- **Description:** This course examines several major areas in horticultural marketing. First, we will introduce the difference between horticultural products and commercial commodities and what's special about horticultural marketing; Second, we analyze the functions performed by the horticultural marketing system. We analyze the marketing behavior of horticultural businesses (farms, wholesalers, garden centers) and cover the core marketing components that should be used by every small horticultural business; Finally, the basic approaches of consumer research (survey techniques, and non-hypothetical experimental approaches, etc.) will be introduced. The recommended textbook is Solomon, Michael R. and Elnora Stuart. 2003. Marketing: Real People, Real Choices, 3rd Ed. This course will consist of lectures, discussions, and student projects and presentations. Students will work on the projects in small group teams of three or four. The target audience is undergraduate students and master of agriculture students.
- **Style:** 60% Lecture, 40% Discussion.
- **Grading:** 30% mid exam, 20% final exam, 15% reports/papers, 10% quizzes, 20% in-class presentation, 5% class participation.
- **Exam Format:** Multiple choice and short answer questions.
Hort 5011 Common Chinese Medicinal Plants: Classification, Identification, and Application
3 credit(s);
Instructor: Chen, Changbin
Description: Student may contact the instructor or department for information.

Hort 5031 Fruit Production and Viticulture for Local and Organic Markets
A-F only, 3 credit(s);
Instructor: Hoover, Emily
Description: This course will cover principles of production of temperate-zone fruit crops focusing primarily on grapes, apples and berries. Topics covered will include site selection, disease, pest and weed management, cultivar selection, pruning and training systems, and post-harvest considerations. The course will include two Saturday field trips with visits to several local vineyards and orchards.
Style: 40% Lecture, 40% Discussion. field trips
Grading: 30% reports/papers, 10% in-class presentation, 10% class participation, 50% problem solving.

Hort 5031 Fruit Production and Viticulture for Local and Organic Markets
A-F only, 3 credit(s);
Instructor: Luby, James Joseph
Description: This course will cover principles of production of temperate-zone fruit crops focusing primarily on grapes, apples and berries. Topics covered will include site selection, disease, pest and weed management, cultivar selection, pruning and training systems, and post-harvest considerations. The course will include two Saturday field trips with visits to several local vineyards and orchards.
Style: 40% Lecture, 40% Discussion. field trips
Grading: 30% reports/papers, 10% in-class presentation, 10% class participation, 50% problem solving.

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 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

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.

Hort 6002 Problem Solving in Horticulture
S-N only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Anderson, Neil O.
Description: Student may contact the instructor or department for information.

Hort 6003 Masters of Professional Studies in Horticulture Professional Experience Program: Internship
S-N only, 1-3 credit(s), max credits 6;
Instructor: Hokanson, Stan C
Description: Student may contact the instructor or department for information.

Hort 6011 Plant Propagation
Hort 6011 Plant Propagation
A-F only, 4 credit(s);
Instructor: Friel, Joshua Craig
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 may 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 online through the use of text, audio, and video hosted on Moodle that you will work through interactively. 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 digital camera capable of taking clearly focused close-ups (most times a simple point-and-shoot camera or cell phone can suffice), and the ability to upload those pictures to Moodle forums. You will use the camera for your weekly homework. The most important thing to remember about the hybrid class format is that it requires the self-discipline and motivation to set aside time each week to work through the online content just as if you were going to a conventional lecture. By doing so, you will find that the ability to revisit material at your convenience affords you the opportunity to explore concepts more thoroughly and gain a deeper understanding of the material in a timeframe comparable to conventional lectures. Labs are taught in a face-to-face format on the St. Paul campus in a state-of-the-art greenhouse facility. And, yes?you get to keep the plants you propagate. The Wednesday night sessions, which are scheduled from 5:10-6:30pm, are face-to-face and are held on the St. Paul campus. During that time we'll have the chance to introduce and explore the topics addressed in that week's online content as well as discuss questions students might have about the previous week's material in a supportive and collaborative learning environment. You should keep in mind when planning your class schedule that the Wednesday night sessions are also when the class exams will be scheduled.
Style: 30% Laboratory, 10% Demonstration, 60% Web Based. Lectures delivered online with mp3 lecture companion podcasts
Grading: 37% mid exam, 8% final exam, 25% reports/papers, 10% quizzes, 10% written homework, 10% laboratory evaluation. These percentages are approximations and are intended to assist with registration planning
Exam Format: Multiple choice, matching, draw and label diagrams, short answer, brief essay. Final will be comprehensive.

Hort 8005 Supervised Classroom or Extension Teaching Experience
S-N only, 2 credit(s); instr consent Credit will not be granted if credit has been received for: AGRO 8005;
Instructor: Hokanson, Stan C
Description: Student may contact the instructor or department for information.

Hort 8007 Extension Horticulture Practicum
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Luby, James Joseph
Description: Student may contact the instructor or department for information.

Hort 8090 Graduate Horticultural Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Luby, James Joseph
Description: Student may contact the instructor or department for information.

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 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.

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: Yust, Becky L
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: Wagner, Heidi Em
Description: Student may contact the instructor or department for information.

Hsg 2463 Housing and Community Development
A-F only, 3 credit(s);
Instructor: Ziebarth PhD, Ann
Description: Student may contact the instructor or department for information.

Hsg 3482 Sustainable Housing: Community, Environment, and Technology
A-F only, 3 credit(s); credit will not be granted if credit already received for: DHA 3482 Credit will not be granted if credit has been received for: ESPM 3601; 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.

**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:** Yust,Becky L
**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 4160H Honors Capstone Project**
A-F only, 2 credit(s), max credits 4;
**Instructor:** Bruin,Marilyn 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:** 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:** Yust,Becky L
**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 4196; Credit 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: Yust, Becky L
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 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: Yust, Becky L
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 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 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 5481 Promoting Independence in Housing and Community
A-F only, 3 credit(s);
Instructor: STAFF
Description: This course is an interdisciplinary seminar in the study of supportive housing across the lifespan. Particular emphasis will be on housing needs of children, older adults, and persons with disabilities. We will examine the ways in which housing facilitates or inhibits the quality of life for persons with special needs. With the instructor's permission this course is open to any interested person. It is designed for upper division undergraduates, Housing Studies Certificate students and students in DHA graduate programs with a housing studies emphasis.
Style: 80% Lecture, 15% Discussion, site visits, guest speakers
Grading: 20% mid exam, 20% final exam, 50% special projects, 10% other evaluation, in class activities, group assignments
Exam Format: essay

Hsg 8192 Readings in Housing Studies
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Ziebarth PhD, Ann
Hsg 8192 Readings in Housing Studies
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Yust, Becky L
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: Yust, Becky L
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: Yust, Becky L
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 8467 Theoretical Perspectives in Housing Studies
A-F only, 3 credit(s);
Instructor: Ziebarth PhD, Ann
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); Grad HumF major or minor or instr consent 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: Human Automation Interaction
3 credit(s), max credits 3, 1 completion allowed;
Instructor: Sethumadhavan, Arathi
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
A-F only, 3 credit(s); ECON 1101, ECON 1102, PSY 1001 Credit will not be granted if credit has been received for: HRIR 8021;
Instructor: Bourgerie, Larry David
Description: Student may contact the instructor or department for information.

HRIR 3021 Human Resource Management and Industrial Relations
A-F only, 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: Schultz, Jennifer Lynn
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 Ahmed
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: Benraouane, Sid Ahmed
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: Wanberg, David
Description: Student may contact the instructor or department for information.

HRIR 5022 Managing Diversity
2 credit(s);
Instructor: Porter II, Louis
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.
HRIR 6025 Leadership and Personal Development
A-F only, 2 credit(s);
Instructor: Hydrie,Yelena
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 8001 Business Principles for the HRIR Professional
A-F only, 4 credit(s);
Instructor: Jha,Jaya
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 8031 Staffing, Training, and Development
4 credit(s);
Instructor: Kammeyer-Mueller,John Daniel
Description: Student may contact the instructor or department for information.

HRIR 8031 Staffing, Training, and Development
4 credit(s);
Instructor: Tubre,Travis
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 8101 HRIR in Practice: Strategy, Execution, and Ethics
2 credit(s);
Instructor: Benraouane,Sid Ahmed
Description: Student may contact the instructor or department for information.

HRIR 8801 Core Seminar: Fundamentals of Economic Analysis for Work and Organizations
4 credit(s);
Instructor: Sojourner,Aaron
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.
Hum 1431 Introduction to Philosophy  
A-F only, 3 credit(s); 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); meets CLE req of Literature  
Instructor: Nichols, Marcia Dawn  
Description: American Identities What does it mean to be an American? How has ?American? been defined historically? How do people from different socioeconomic backgrounds experience ?Americanness? differently? Are some individuals more ?American? than others? Who decides what being an American means? Are people from countries in the Western Hemisphere other than the United States also ?American?? 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 identity in an American context. 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: Memoirs of Mass Violence  
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 1435 Introduction to History: Trouble Spots in Today's World  
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 (1975-1979), the Rwandan Genocide (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 3441 Ethics of Medicine and the Sciences  
A-F only, 3 credit(s); meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics
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 1101 Foundations of Industrial and Systems Engineering
A-F only, 4 credit(s);
Instructor: Carlsson, John Gunnar
Description: Student may contact the instructor or department for information.

IE 2021 Engineering Economics
A-F only, 4 credit(s);
Instructor: Miller, Lisa A
Description: Student may contact the instructor or department for information.

IE 4521 Statistics, Quality, and Reliability
4 credit(s);
Instructor: Leder, Kevin Zox
Description: Student may contact the instructor or department for information.

IE 4521 Statistics, Quality, and Reliability
4 credit(s);
Instructor: He, Qie
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: Kong, Guangwen
Description: Student may contact the instructor or department for information.

IE 5441 Financial Decision Making
A-F only, 4 credit(s);
Instructor: STAFF
Description: To train students to become better problem solvers, appreciate the importance of cost and revenue estimates, and inputs. To actively seek opportunities to improve customer satisfaction and reduce costs. Subject matter: (1) Financial Accounting - Preparation of financial statements to generate information for users external to the organization according to the prescribed rules and conventions. Accounting for inventories; Plants, equipment depreciations, Accounts Receivables; liabilities, Stockholders’ equity, cash flow statements, and analysis of financial statements. (2) Time Value of Money - Collapsing the time element in the cashflow of inputs and outputs for various alternatives: Elementary exposure how to handle risk, the material is not covered in the textbook. Supplementary reading material will be prescribed. (3) Managerial Accounting (Chapters 15-24) Accounting for management and control of manufacturing and service operations. Topics of job casting, process costing, activity based costing, activity based management, standard costing and variance accounts, responsibility accounting, transfer prices, performance evaluation, operational and capital budgeting. The focus is to improve problem solving and decision making capabilities to improve productivity, profitability for the firm and improve value to the customer through improving value chain integration reducing quality losses and through business process reengineering.
Style: 60% Lecture, 10% Discussion, problem solving
Grading: 40% mid exam, 60% final exam.
Exam Format: problems; The final exam will be comprehensive with an 80% weight to management accounting. Homework is assigned in the class.
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: Wang, Zizhuo
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: Miller, Lisa A
Description: Student may contact the instructor or department for information.

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 8552 Advanced Topics in Production, Inventory, and Distribution Systems: Large Deviations and Rare Event Simulations
4 credit(s), max credits 8;
Instructor: Leder, Kevin Zox
Description: Student may contact the instructor or department for information.

IE 8773 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Leder, Kevin Zox
Description: Student may contact the instructor or department for information.

IE 8774 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Leder, Kevin Zox
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: Benjaafar, Saif
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.
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 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.)

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 2GB 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:** Raabe, John J  
**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 4596 Internship**  
1-3 credit(s), max credits 6;  
**Instructor:** Tymeson, Nathan Paul  
**Description:** Student may contact the instructor or department for information.

**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 registering  
**Credit 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.  
**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.

**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 2012 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 and 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.

**INet 4709 Database Administration**  
A-F only, 2 credit(s);  
**Instructor:** Cross, Lynn Marie  
**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 2012 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 and 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: Reily, Ken  
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: Reily, Ken  
Description: This course is designed for students who have taken IDSC 3101: Introduction to Programming or have equivalent programming experience and wish to supplement their basic programming knowledge. The course welcomes students from all majors who wish to learn basic computer programming. This is a required course for MIS majors. This course will supplement students' basic knowledge of programming concepts by introducing intermediate programming concepts that allow the student to transition from developing simple applications to developing larger and more full-featured applications. The course will cover topics such as object-oriented programming techniques, database applications, and modern web applications. In addition, the course will refine students' basic techniques by covering intermediate programming style, program performance, and basic user interface design principles. Students will learn these concepts through step-by-step tutorials, in-class demonstrations and exercises (the course is taught in an interactive classroom lab), and several take-home programming assignments. Student performance will be evaluated using a combination of objective quizzes and exams, completion of assigned exercises, and expert evaluation of the students' take-home programming assignments. This course uses the latest tools and techniques for building applications, and assumes that students have introductory programming knowledge from IDSC 3101 or equivalent experience.  
Style: 20% Lecture, 10% Discussion, 50% Laboratory, 20% Demonstration.  
Grading: 20% mid exam, 30% final exam, 50% written homework. Written homework consists of take-home computer programming assignments.  
Exam Format: Objective (multiple choice/true-false) and/or computer programming

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
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 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 4441 Electronic Commerce
A-F only, 2 credit(s);
Instructor: Cao, Chengxin
Description: Student may contact the instructor or department for information.

IDSc 4455 Web 2.0: The Business of Social Media
A-F only, 2 credit(s);
Instructor: Ren, Yuqing
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 6435 Business Process Excellence
A-F only, 2 credit(s);
Instructor: Khan, Firasat
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 6491 Independent Study in Information Systems
**A-F only, 1-4 credit(s), max credits 8;**
**Instructor:** Subramani,Mani R

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

### 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 Management Engineering
290 McNamara Center

### ISME 5101 Project Management
**A-F only, 3 credit(s);**
**Instructor:** Smith,Karl Aldrich

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

ISME 5500 Public Interactions  
A-F only, 1 credit(s), max credits 2;  
Instructor: Hilger, A Peter  
Description: Student may contact the instructor or department for information.

ISME 5503 Financial Management in Public Organizations  
A-F only, 2 credit(s);  
Instructor: Waldron, Craig Lemont  
Description: Student may contact the instructor or department for information.

ISME 5504 Construction Law and Ethics  
A-F only, 2 credit(s);  
Instructor: Mackay, Deborah  
Description: Student may contact the instructor or department for information.

ISME 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: 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. Please click class URL to view the syllabus.

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: Student may contact the instructor or department for information.

IS 5100 Innovation Studies Seminar: 21st Century Questions  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Neraas, Julie  
Description: In some of the world's great stories everything depends upon asking the right question. Certain questions test the truth of our lives: who is my neighbor? What happens after we die? What does true patriotism look like? Some questions are timeless, others are unique to a particular time in history. In this course we reflect together on these questions: Can we learn to resolve our problems non-violently? What might it mean for the United States to be a good neighbor to Mexico? What does democracy require of us? How can our food systems benefit the most people, while treading lightly on the earth? How can we serve The Larger Story? What would a global spirituality look like in our global world? What can we celebrate that is right with the world even now? Students choose an additional question that is of interest to them. We will learn from: theologians, environmentalists, writers, poets. Mexican migrant workers, experts on food systems, a cosmologist, and more.

IS 5100 Innovation Studies Seminar: Whole Brain Innovation  
A-F only, 2 credit(s), max credits 24, 24 completions allowed;  
Instructor: Kumaraea, Araela  
Description: Student may contact the instructor or department for information.

IS 5950 Special Topics
A-F only, 1 credit(s), max credits 12, 3 completions allowed;  
Instructor: Lloyd, Roseann  
**Description:** Explore ways to slow down and really see the world around us. One premise of these exercises is that fresh observation of the world can lead us out of our own obsessions and burdens. Another premise is that taking pleasure in the world can lead us to renewal for work and change. Beginning with a discussion about slowing down to see, we'll then proceed with exercises in and out of the classroom: writing practice, sitting and looking (in contrast to sitting with eyes closed in traditional meditation), and the golden ribbon exercise (from John Caddy and Joe Paddock's work with ecology) as many writers refer to their writing as a meditative practice; then transition to “freewriting” as described by Natalie Goldberg. Later, we'll create more images by drawing a mandala and create longer poems from memories and the poem by Nazim Hiket “Things I Didn't Know I Loved.” Weather permitting, we'll revisit our golden ribbon outside before adjourning. This one credit course meets for one day and has some online work and a paper due 3 to 4 weeks later.

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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, attorney, risk manager, insurance agent/broker/consultant, underwriter, and loss adjuster. Types of insurance include motor vehicle compensation, liability, workers’ compensation, and property insurance. Insurance functions of pricing, marketing, underwriting, and claims administration are explained with concepts of adverse selection and moral hazard effects. These functions are also performed in private and governmental self insurance programs. Industry practitioners and attorneys are guest lectures. Several class sessions are approved each term for attorney continuing education credit (CLE). Life and health insurance topics are covered in Ins 4101 & Ins 4201.

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**Integrated Behavioral Health  20 Ruttan Hall**

**IBH 6011 Foundations in Differential Diagnosis**  
A-F only, 3 credit(s);  
Instructor: Kammer-Hodge, Heidi Elizabeth  
**Description:** Student may contact the instructor or department for information.

**IBH 6021 Methods and Models III: Synthesis Seminar in Client Centered Care**  
A-F only, 2 credit(s);  
Instructor: Desanto, Paula Louise  
**Description:** Working with individuals with mental illness, chronic substance use disorders, or a co-occurring combination. Applying step-wise, individualized, recovery oriented evidence-based practices for risk reduction, relapse prevention, and recovery maintenance. Students use case studies to evaluate/apply risk reduction and personalized interventions.
IBH 6031 Methods and Models IV: Trauma and Anxiety, Assessment and Treatment Intervention  
A-F only, 2 credit(s);  
Instructor: Sutherland PhD,LP,RJohn  
Description: Student may contact the instructor or department for information.

IBH 6061 Advanced Diagnostic Assessment  
A-F only, 2 credit(s), max credits 3, 1 completion allowed;  
Instructor: Frenz, David Arthur  
Description: Diagnosing individuals with chronic/persistent mental health disorders, personality disorders, and associated substance use disorders. Case studies, field placement with multidisciplinary team.

IBH 6071 Advanced Professional Issues  
A-F only, 3 credit(s);  
Instructor: Wamsley, Debra S  
Description: Developing a personal ethical decision model that incorporates five moral principles, ACA/NAADAC codes of ethics and statutes/regulations that apply to mental health/substance abuse counseling. Case studies.

IBH 6081 Human Lifespan Development and Behavioral Health  
A-F only, 2 credit(s);  
Instructor: Wamsley, Debra S  
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. Human development across life span. Implications for direct clinical practice. Theories of human development. Co-occurring mental health/substance use disorders. Normative changes, individual differences, typical/atypical patterns of development.  
Style: Online  
Grading: See attached syllabus

IBH 6101 Family Dynamics and Therapy  
A-F only, 3 credit(s);  
Instructor: Becher-Ingwalson, Ann M  
Description: Family life cycle, communication patterns, family dynamics, multi-generational patterns, systems theory/interventions for appropriate use of family resources to enhance intervention, treatment, family/individual functioning and maintenance processes. Working with families with mental illness, substance use and co-occurring disorders.

IBH 6111 Research and Evaluation Methods  
A-F only, 3 credit(s);  
Instructor: Everts, Jessie Claire  
Description: Models of program evaluation. Use of research findings for program modification. Elements of research process, types of designs, program evaluation. Ethical considerations of research. Measurement concepts.

IBH 6228 Mental Health and Addiction Program Administration  
A-F only, 2 credit(s);  
Instructor: Clubb, Joseph Raymond  
Description: Student may contact the instructor or department for information.

IBH 6229 Crisis Assessment and Management  
A-F only, 2 credit(s);  
Instructor: Clubb, Joseph Raymond  
Description: Student may contact the instructor or department for information.

IBH 6910 Topics in Integrated Behavioral Health  
A-F only, 2 credit(s), max credits 32, 8 completions allowed;  
Instructor: Nordstrom-Loeb, Barbara E  
Description: Student may contact the instructor or department for information.

IBH 6996 Internship for Integrated Behavioral Health  
S-N only, 1-8 credit(s), max credits 8, 4 completions allowed;  
Instructor: Becher-Ingwalson, Ann M  
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. Culminating field experience of
MPS-IBH. On-site placement in public or private mental health, addictions/integrated treatment setting. Bridge between training/professionalism.

**Style:** Online  
**Grading:** See attached syllabus

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**Inter-College Program**  
20 Ruttan Hall

**ICP 3093 Directed Study**  
A-F only, 1-15 credit(s), max credits 15, 1 completion allowed;  
Instructor: STAFF  
**Description:**

**ICP 3101W Inter-College Program Proposal Development**  
A-F only, 2 credit(s); Meets CLE req of Writing Intensive  
Instructor: Burger Sanchez, Amy  
**Description:** Student may contact the instructor or department for information.

**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: Nagle, Heather  
**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.

**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 -Professionism

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**Interdepartmental Study**  
411 (STSS) Science Teaching Student Services
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: Student may contact the instructor or department for information.

ID 1201 Major and Career Exploration
2 credit(s);
Instructor: Halverson, Joyce A
Description: Student may contact the instructor or department for information.

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: Reichelt, Erin Kristine
Description: Student may contact the instructor or department for information.

ID 3201 Career Planning
2 credit(s);
Instructor: Schmidt Whitney, Angie
Description: Student may contact the instructor or department for information.

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 3208 Internship Reflection: Making Meaning of Your Experience
1 credit(s);
Instructor: Buckley, Christopher Gene
Description: Student may contact the instructor or department for 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: Student may contact the instructor or department for 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: Student may contact the instructor or department for 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: Student may contact the instructor or department for 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: Student may contact the instructor or department for information.

ID 3901 Scholars Program Capstone Seminar  
A-F only, 1 credit(s);  
Instructor: Hirt, Laurel Elizabeth  
Description: Student may contact the instructor or department for information.

ID 3901 Scholars Program Capstone Seminar  
A-F only, 1 credit(s);  
Instructor: Dammer Hess, Laura Ann  
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: 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.

**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 2613 Interior Structures, Systems, and Life Safety
A-F only, 4 credit(s);
Instructor: Yust, Becky L
Description: Student may contact the instructor or department for information.

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 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 is working towards a full-scope office planning and design project. The concept of the ?design team? is introduced as it applies to their work in the course, and more importantly as it occurs in practice. The project will enable students to experience the design process, with an emphasis on space planning, as well as an understanding of open office systems furnishings, creation of a sense of place through development of a concept that supports the client?s culture and brand, and application of wayfinding knowledge. Human factors, safety and security, meaning of place through concept development and interior detailing is also addressed. Students will also apply knowledge relative to integration of building systems, lighting, life safety and code compliance, materials and finishes, accessibility guidelines, and universal design principles. It is expected that knowledge gained from previous courses (e.g., IDES 2613 and IDES 2604) will be applied. Following design development of the office space, the semester culminates in production of a full set of construction documents, including specifications. 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, personal, social, 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. Students in this class will have the opportunity to work individually and collaboratively on delving into these issues through readings, discussion, and gathering of knowledge from primary and secondary research activities. Critique by design practitioners and code officials and guest lectures from
workplace and building systems experts add depth to learning via first-hand interaction.

**Style:** 7% Lecture, 7% Discussion, 3% Small Group Activities, 8% Student Presentation, 2% Demonstration, 1% Field Trips, 70% Studio, 2% Guest Speakers.

**Grading:** 21% reports/papers, 70% special projects, 9% reflection paper. Evaluation of studio projects constitutes 70% of the course evaluation. The grade is based on a combination of graphic (design), written, and oral (verbal presentation) components.

**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**
- 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**
- 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**
- 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**
- A-F only, 2 credit(s), max credits 4;
- **Instructor:** Zollinger, Stephanie Watson
- **Description:** Student may contact the instructor or department for information.

**IDes 4193 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 4193 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 4193 Directed Study in Interior Design**
- A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Guerin, Denise A
IDes 4193 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 4193 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 4196 Internship in Interior Design
S-N only, 1 credit(s);
Instructor: Hadjiyanni, Tasoulla
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design
S-N only, 1 credit(s);
Instructor: Martin, Caren Samter
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design
S-N only, 1 credit(s);
Instructor: Guerin, Denise A
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design
S-N only, 1 credit(s);
Instructor: Zollinger, Stephanie Watson
Description: Student may contact the instructor or department for information.

IDes 4196 Internship in Interior Design
S-N only, 1 credit(s);
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, 3 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 8192 Readings in Interior Design
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 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.

**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 5110 Business and the Environment in Costa Rica**  
A-F only, 4 credit(s);  
Instructor: Marcus, Alfred A  
Description: Student may contact the instructor or department for information.

**IBus 5150 India Seminar: Managing in a Global Environment**  
A-F only, 4 credit(s);  
Instructor: Subramani, Mani R  
Description: Student may contact the instructor or department for information.

**IBus 5171 Global Business Practicum in Southern China**  
A-F only, 4 credit(s);  
Instructor: Lipe, Jay  
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: Madzar, Svjetlana
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 Ahmed
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.

Interpersonal Relationships Research 104 Child Development

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.

IRel 8360 Seminar: Topics in Interpersonal Relationships Research
1-3 credit(s), max credits 6, 3 completions allowed;
Instructor: Jones, Susanne Margarethe
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

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**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

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**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

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**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

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**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:** In this course we will examine Italy's strange and fascinating modernity and its once powerful place in Europe and in the Mediterranean. In this course, students will explore through a weekly combination of film and guest lecturers crucial moments of Italy's history and culture and society starting from the Roman Empire to the present day. Through film and readings students we will be learning about Italy's participation in and contributions to the world of music, theater, art, science, as well as politics, religion, media, journalism, literature and history. Weekly guest lectures and critical readings expand from different disciplinary perspectives upon issues raised by films. The films follow a historical chronological order and among the topics broached are: urban life, religion, nationalism, opera, violence, leisure, food, fascism, mafia, family, emigration/immigration, ethnicity, and Mediterranean culture. Taught in English.

**Exam Format:** Midterm and final exam; short essays responding to a topic illustrated by a film/lecture/reading.

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**Ital 3015 Reading, Conversation, and Composition**

4 credit(s);

**Instructor:** STAFF
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 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 3550 Topics in 19th Century Italy: Political Passions
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Ferlito, Susanna Florenc
Description: "Political Passions: Towards Just Nations" How did European writers from the 16th century to the late nineteenth-century understand the power of emotions to move people and particularly leaders to act politically? How do we understand the emotions and their relation to knowledge? Are emotions universal or local and particular to time and place? The Italian nation-building process known as the Risorgimento will offer an analytical fulcrum for us to examine how different writers and political thinkers sought to understand and harness the emotions (compassion, love, hate, anger, envy, resentment, etc) to fuel political change as well as to address social, gender, and political injustice in society and cement individual and collective emotional attachment to the nation. Authors read will include: Machiavelli, Rousseau, Kant, Renan, Mazzini, Comte, JS Mill, Belgiojoso, D'Azeglio, Pisacane, De Amicis, Nietzsche. Each week, students will be responding to each reading with a short moodle exercise to prepare them for class discussion (300 words) and posting a question for group discussion based on the reading. These written exercises will be graded on a scale of 1-10. (Worth 30%), with class discussion 30%. A final research paper of 12-15 pages 40%. Course is taught in English. Students of Italian and French will be reading in their target language, discussion will be in English. If you have taken Italian 3015 you can enroll under the Italian section number (3550). If you have not taken Ital 3015 and/or are a French major/minor (or do not study either Italian or French) you can enroll under the FRIT number.

Ital 3640 Topics in Italian Studies
3 credit(s), max credits 12, 4 completions allowed;
Instructor: STAFF
Description: Reimagining the Southern Question: Film, Literature, and Theory. One of the fundamental tropes in Italian post-unification history is that of the ?two Italys.? Notwithstanding its formal unity, the substantial fracture of the peninsula in a modern and rational North, and a backward and wild South has become common sense in Italian culture. On the basis of this framework, Southern Italy has been continuously reduced to the status of a problem. Through a wide variety of essays, films, and literary fictions engaging with the Italian South, in this course we will depart from reductive assumptions around the Meridione and discover it as a rich and contradictory life-world, a space marked not only by violence, corruption, and criminality, but also by ingenuity, resistance, and progress. But what happens to conceptions of Italianity once we question the solidity of the North-South divide? What happens to conceptions of national identity once the South is appreciated as a set of alternative answers rather than as a question to be resolved? -Taught by our new Italian faculty member, Lorenzo Fabbri

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: Bray, Laura Smolizza
Description: Student may contact the instructor or department for information.

Ital 4002 Beginning Italian
2 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ITAL 1002;
Instructor: Lavecchia, Ornella
Description: Student may contact the instructor or department for information.

Ital 4002 Beginning Italian
2 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ITAL 1002;
Instructor: Cocchi, Cristina
Description: Student may contact the instructor or department for information.

Ital 4003 Intermediate Italian
2 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ITAL 1003;
Instructor: Barbieri, Monica
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 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: Noakes, Susan J
Description: Student may contact the instructor or department for information.

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. 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 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 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 3021 Intermediate Japanese
5 credit(s); 1012 or instr consent Credit will not be granted if credit has been received for: JPN 4003;
Instructor: Mita, Ayumi
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: Tazawa, Kenichi
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, Minorin
Description: Student may contact the instructor or department for information.
Jpn 4003 Intermediate Japanese
3 credit(s); 4002, grad student
Credit will not be granted if credit has been received for: JPN 3021;
Instructor: Mita, Ayumi
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;
Instructor: Tazawa, Kenichi
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;
Instructor: Buchanan, Michiko Todokoro
Description: Student may contact the instructor or department for information.

Jpn 4041 Advanced Japanese Conversation and Composition
4 credit(s);
Instructor: Buchanan, Michiko Todokoro
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.

Jpn 5993 Directed Studies in Japanese
1-15 credit(s), max credits 15, 1 completion 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: Marran, Christine L
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); 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: RELS 3034; Meets CLE req of Historical Perspectives
Instructor: Paradise, Natan
Description: Who is a Jew? What do Jews believe? What do Jews do? What do we mean by "religion"? How do Jews read texts within their tradition? And perhaps most importantly, how many answers are there to a Jewish question? Explore the mythic structures, key texts, historical experiences, narratives, practices, beliefs and worldviews of the Jewish people as they have developed over more than three millennia. Learn about the roots of Judaism in the Hebrew Bible and the history of ancient Israel, and then discover the creative forces that developed within Judaism as a national narrative confronted the forces of history, especially in the forms of the Persian, Greek, and Roman empires. From the development of Rabbinic Judaism to encounters with the rise of Christianity and then Islam, from the Jewish experience in the medieval world to Judaism's engagement with the enlightenment and modernity, from the Crusades to the Holocaust, from Ancient Israel to modern Israel, learn how the Jewish people have maintained ideas and identities despite being scattered across time and place for 2500 years.

JwSt 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: Levinson PhD, Bernard M.
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
JwSt 3601 Fleeing Hitler: German and Austrian Filmmakers Between Europe and Hollywood

Instructor:
3 credit(s); Credit will not be granted if credit has been received for: RELS 3521W; each worth 20%. There will be two short papers each worth 15%. Regular very short homework assignments are collected; best 10 out of 12 are counted. There will be two mid-term exams each worth 20%. There will be two short papers each worth 15%.

Exam Format: Each exam is 50% essay and 50% multiple choice.

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

Instructor: Paradise, Natan

Description: Who is a Jew? What do Jews believe? What do Jews do? What do we mean by "religion"? How do Jews read texts within their tradition? And perhaps most importantly, how many answers are there to a Jewish question? Explore the mythic structures, key texts, historical experiences, narratives, practices, beliefs and worldviews of the Jewish people as they have developed over more than three millennia. Learn about the roots of Judaism in the Hebrew Bible and the history of ancient Israel, and then discover the creative forces that developed within Judaism as a national narrative confronted the forces of history, especially in the forms of the Persian, Greek, and Roman empires. From the development of Rabbinic Judaism to encounters with the rise of Christianity and then Islam, from the Jewish experience in the medieval world to Judaism's engagement with the enlightenment and modernity, from the Crusades to the Holocaust, from Ancient Israel to modern Israel, learn how the Jewish people have maintained ideas and identities despite being scattered across time and place for 2500 years.

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 Perspectives

Instructor: Levinson, Bernard M.

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 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. Consequently, the course does not address personal religious belief or matters of faith. All texts and all religious traditions will be examined analytically. Students are expected to understand and master this approach, which includes questioning conventional cultural assumptions about the historical composition and authorship of the Bible. Willingness to ask such questions and openness to new ways of thinking and reading are essential to successful participation in the course. This course meets the Literature LE Requirement.

Style: 90% Lecture, 10% Discussion.

Grading: 20% mid exam, 25% final exam, 30% reports/papers, 5% written homework, 20% additional semester exams.

Exam Format: Each exam is 50% essay and 50% multiple choice.

JwSt 3520 History of the Holocaust

3 credit(s); Credit will not be granted if credit has been received for: RELS 3521W;

Instructor: Schmieder, Falko

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

JwSt 3601 Fleeing Hitler: German and Austrian Filmmakers Between Europe and Hollywood
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: GER 1601; Meets CLE req of Arts/Humanities
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 3900 Topics: Jewish Studies
A-F only, 3 credit(s), max credits 15, 5 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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
3 credit(s); 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: 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: 50% Lecture, 25% Discussion, 25% Small Group Activities.
Grading: 12% mid exam, 12% final exam, 10% reports/papers, 20% quizzes, 12% additional semester exams, 33% class participation.

Jour 1001 Introduction to Mass Communication
3 credit(s); 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: 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? 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. The orientation is on the industries of mass communication and how they are changing and evolving in light of digital technologies. 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:** 12% mid exam, 12% final exam, 10% reports/papers, 20% quizzes, 12% additional semester exams, 33% class participation.

**Jour 1001 Introduction to Mass Communication**
3 credit(s); 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: Thiel-Stern, Shayla

**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.

**Jour 1001H Honors: Introduction to Mass Communication**
A-F only, 3 credit(s); 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 1904 Freshman Seminar: The Symbolic Meanings of Money**
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
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: 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: Zamith, Rodrigo

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

**Jour 3005 Mass Media Effects**
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**

- **3 credit(s);**
- **Instructor:** STAFF

**Description:** JOUR 3006 is an introduction to the study of visual media and to the role of images in mass communication and contemporary culture. The central goals of the course are to: 1) provide you with an understanding of the basic visual elements from which images are constructed; 2) sharpen your ability to analyze the messages encoded within visual images; 3) enhance your ability to articulate your reactions to images both verbally and in writing; 4) provide a strong foundation for professional work and scholarship in visual communication. At the end of the semester you will be looking at visual images differently than you do now: by studying the language of images and their social contexts you'll be able to appreciate their complexity, understand how to discover their meanings, and grasp their significance. If you attend class, look, listen, and respond, your level of visual literacy will be significantly enhanced, and you will be able to become a knowledgeable consumer of visual images.

**Jour 3101 News Reporting and Writing**

- **A-F only, 3 credit(s);**
- **Instructor:** Golden, Gayle Celeste

**Description:** Jour 3101 (News Writing and Reporting) is a basic, skills-based course designed to teach journalism students the fundamentals of news writing and reporting as demanded by newsrooms across all forms of media. The course is requires outside research (reporting) that includes interviewing, basic fact gathering and document search.

**Jour 3102 Convergence Journalism**

- **A-F only, 3 credit(s);**
- **Instructor:** Benson, Dana Richard

**Description:** JOUR 3102 (Convergence Journalism) is an introduction to creating, repurposing and assembling content for distribution across integrated media platforms. Audio slideshows, video with sound, computer-based management of photos/video, web-related skills, media platforms.

**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 3173W Magazine Writing**
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Bianco III, Anthony Joseph
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: 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: Jour 3201 is a required context course designed to introduce professional journalism students to strategic communications. The curriculum is designed to provide students with a fundamental awareness and understanding of strategic communication theory and methods which will prepare them for their advanced coursework in Advertising and/or Public Relations. Additionally, this course is designed as a survey of the field so that students can gain an important understanding of how the various practice areas work together. The class uses lecture, discussion and assignments to advance the curriculum. During the semester, students are expected to complete reading and class assignments, follow current industry news and participate in class and online discussions.
Style: 40% Lecture, 15% Film/Video, 20% Discussion, 10% Small Group Activities, 5% Student Presentation, 10% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 30% special projects, 10% quizzes, 10% written homework. Online Discussions (10%)

**Jour 3201 Principles of Strategic Communication**
A-F only, 3 credit(s);
Instructor: Rim, Hyejoo
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 Marie
Description: This course introduces students to creative strategic development and conceptual thinking in advertising. They will develop creative ideas based on strategies, with particular emphasis on media infinite concepts. At the end of the term, successful students will be able to recognize solid advertising, develop an intelligent creative strategy, create ideas that solve business problems, 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 3253 Account Planning**
- **A-F only, 3 credit(s);**
- **Instructor:** Eighmey, John
- **Description:** Jour 3253 is a skills based course examining the role of account planning in integrated strategic communications development in today’s evolving and complex cultural and media environments. It is designed to teach students how to use research and analytic tools to identify strategic insights about target stakeholders (e.g., consumers and publics) that, in turn, can be used to develop effective brand positions and message strategies. Students who take this course will develop an awareness and understanding of the skills needed to become an account planner and an opportunity to apply those skills in various situations and settings.

**Jour 3253 Account Planning**
- **A-F only, 3 credit(s);**
- **Instructor:** Kim, Taemin
- **Description:** Jour 3253 is a skills based course examining the role of account planning in integrated strategic communications development in today’s evolving and complex cultural and media environments. It is designed to teach students how to use research and analytic tools to identify strategic insights about target stakeholders (e.g., consumers and publics) that, in turn, can be used to develop effective brand positions and message strategies. Students who take this course will develop an awareness and understanding of the skills needed to become an account planner and an opportunity to apply those skills in various situations and settings.

**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 3275 Digital Media in Strategic Communication**
- **A-F only, 3 credit(s);**
- **Instructor:** Gross, Michelle Lynn
- **Description:** Student may contact the instructor or department for information.

**Jour 3275 Digital Media in Strategic Communication**
- **A-F only, 3 credit(s);**
- **Instructor:** Mandle, Daniel N
- **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:** 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:** Husom, David Harold
- **Description:** Student may contact the instructor or department for information.
Jour 3321 Media Design
A-F only, 3 credit(s);  
Instructor: Plesser, Leslie Jeanne  
Description: Student may contact the instructor or department for information.

Jour 3321 Media Design
A-F only, 3 credit(s);  
Instructor: Keenan, Zachary  
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: News writing, reporting, video photography/editing, on-air delivery.

Jour 3551 Economics of New Media
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
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 3615 History of the Documentary
3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Schwartz, Dona  
Description: This course examines the invention of photographic media and their use as representations that truthfully document reality. Rather than emphasize a historical progression we will focus on several topical issues within a historical framework. These issues include the truth-value of factual versus fictive representations, the influence of political and economic contexts on the form and content of documentary work, the convergence of formerly distinct realms of media practice, and the role of the media maker with respect to the role of the subject. In addition, the course will examine the aesthetic dimensions of documentary photography and film, investigating the questions, ?what do documentaries look like?? and ?why do they look the way they do?? Screenings of landmark films and photographs are a crucial component of the course. Lectures and discussions will supplement and provide context.
Jour 3741 Diversity and Mass Communication
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: This course examines the relationship between mainstream media and racial and ethnic groups in the United States. The subject is increasingly important because of the expanding racial pluralism in the United States and the resulting need for media to increasingly integrate their workforces, as well as to target racially and ethnically diverse audiences across a host of media. Various groups and cultures will be discussed, including Black/African Americans, Latinos/Hispanics, Asian Americans Arab Americans; White Americans; and American Indians/Native Americans.

Jour 3745 Mass Media and Popular Culture
3 credit(s); 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: Mass Media and Popular Culture is an exploration of the cultural role of media in our lives and societies. It is a study of how, why, and to what end popular television, films, music, entertainment, sports, brands and advertisements are produced and consumed. Mediation is examined as a process through which artists, producers, marketers, critics, and audiences create meaning. This course teaches you how to critically examine popular culture presented in the media by examining the representations of class, gender, race, ethnicity and nationality in pop culture media texts.
Style: 40% Lecture, 20% Film/Video, 30% Discussion, 10% Small Group Activities.
Grading: 25% mid exam, 25% final exam, 15% quizzes, 10% written homework, 15% reflection paper. Online Discussion Posts (10%)
Exam Format: Multiple Choice

Jour 3771 Mass Media Ethics: Moral Reasoning and Case Studies
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
3 credit(s); Credit will not be granted if credit has been received for: JOUR 3776H;
Instructor: Sanders, Amy Kristin
Description: This course examines significant court decisions affecting the legal rights and privileges of journalists, and survey the development of First Amendment media law, including prior restraints, libel, privacy, reporters? privilege, access to courts and to government information, and government regulation of electronic free speech.

Jour 3796 Mass Media and Politics
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: 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 Marie
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: Wehrenberg, Steven James
Description: Student may contact the instructor or department for information.

Jour 4193 Brovald-Sim Community Journalism Practicum: Murphy News Service
A-F only, 3 credit(s);
Instructor: Moyer, J. Keith
Description: JOUR 4193 is a field-based practicum course for advanced journalism majors held in professional media organizations. The course is designed to give students professional experience and complementary instructional content.

Jour 4242 Advertising Portfolio Development
A-F only, 3 credit(s);
Instructor: Johnson, Jennifer Marie
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 4251 Psychology of Advertising
3 credit(s); Credit will not be granted if credit has been received for: JOUR 5251;
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.

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: Reid, Victoria Jane
Description: Student may contact the instructor or department for information.

Jour 4262 Management for Strategic Communication
A-F only, 3 credit(s);
Instructor: Spong, Douglas K
Description: Student may contact the instructor or department for information.

Jour 4263 Strategic Communication Campaigns
A-F only, 3 credit(s);
Instructor: Strother, Patrick J
Description: Student may contact the instructor or department for information.

Jour 4263 Strategic Communication Campaigns
A-F only, 3 credit(s);
Instructor: Kaiser, Kent Luther
Description: Student may contact the instructor or department for information.

Jour 4263 Strategic Communication Campaigns
A-F only, 3 credit(s);
Instructor: Wehrenberg, Steven James
Description: Student may contact the instructor or department for information.

Jour 4274W Advertising in Society
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:** JOUR 4451 (Advanced Electronic News Writing and Reporting) is an advanced, skills-based course. The emphasis of this course is researching, reporting, shooting writing and editing TV news packages. Students will learn to master the use of digital cameras and a desktop non-linear system. Students will also learn how to better write to video, how to improve their voice work and on-camera performance. Students will research reports, shoot, write and edit TV news packages and create a resume tape. Students will also contribute reporting, writing anchoring and other work for University Report.

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**Jour 4551 New Media and Culture**

**3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Technology and Society**

**Instructor:** Thiel-Stern, Shayla

**Description:** New Media Culture is a critical exploration of how new media communication technology has shaped and been shaped by culture and society. Within various fields of liberal arts? from those based in social science to hard science, from humanities to arts and literature? we examine the issue of how new media functions within the world and gives shape to various disciplines within the liberal arts. Furthermore, added insight on this vital topic will lend a critical understanding of new media as it relates to your own liberal education. Although new media has become a standard part of learning within your own major fields of study, this course will encourage you to critically examine the broad function of digital media in your lives. The course will examine a number of relevant themes within the study of new media and culture, from the realms of politics and government to the understanding of gender, the media, globalization, democracy and literature as explored and defined through new media.

**Style:** 40% Lecture, 15% Film/Video, 30% Discussion, 10% Guest Speakers, 5% Web Based.

**Grading:** 30% mid exam, 30% final exam, 20% special projects, 10% quizzes, 5% attendance, 5% class participation.

Grading changes per semester, depending on the instructor. The above is simply an example of a typical semester.

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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
Jour 4801 Global Communication  
3 credit(s);  
Instructor: STAFF  
Description: This course is designed to critically examine how political, economic, social, technological, and cultural factors affect the structure, processes, and functions of global communication. The course attempts to address some key theoretical and empirical questions, with particular emphasis on news media. A sample of these questions follows: What are the assumptions and realities of global communication? Why has the flow of news and information across national borders become a thorny issue in international relations? What are the structural factors influencing the worldwide production, dissemination, and consumption of cultural products at the national and international levels? What are the historical implications of global communication for national sovereignty and integrity? What role do the mass media play in global conflicts between competing ideologies and politics, such as the growing concern over the clash of civilizations?

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.

Jour 4991 Special Topics in Mass Communication: Context: GMD App: Conceptualizing an App for the Goldstein  
A-F only, 3 credit(s), max credits 6;  
Instructor: LeFevre, Camille Lynn  
Description: Student may contact the instructor or department for information.

Jour 4992 Capstone: Field Based Practicum  
A-F only, 3 credit(s), max credits 6;  
Instructor: Golden, Gayle Celeste  
Description: JOUR 4992 is a field-based practicum course for advanced journalism majors held in professional media organizations. The courses are designed to give students professional experience and complementary instructional content.

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
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 Marie
Description: Student may contact the instructor or department for information.
Instructor: Squires, Catherine R  
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects  
A-F only, 3 credit(s);  
Instructor: Thiel-Stern, Shayla  
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: Journalism 5131 is an upper level reporting course and a SJMC capstone course. Therefore, the approach to the class will be dual: First, there is an academic component?studying the best examples in-depth reporting from muckrakers to yesterday's New York Times. This part of the course will be presented in a seminar style with a high-expectation for student involvement. Second, there is a hands-on component ? giving you the opportunity to exercise what you learn in this class and elsewhere in your journalism program. This part of the course will require you to identify appropriate stories for in-depth reporting, outline the proposed stories to your instructor, thoroughly report and write the stories, and go through the editing process. Students will also produce graphics and photographs, and might consider various multi-media possibilities. The class topics will be organized around essential social issues, such as health care, politics, poverty, business or other topics.

Jour 5174 Capstone: Magazine Editing and Production  
A-F only, 3 credit(s);  
Instructor: Larsen, Elizabeth F  
Description: JOUR 5174 is the SJMC's capstone practicum in magazine and web writing, editing, photography, graphic design, and production. Students will study concepts of magazine and web communication and form with a special concern for how words, pictures, and design can be combined effectively. Over the semester the class will create and produce a professional quality single-theme magazine and website. During this process students will experience firsthand the organization and working of an editorial and production staff, and the implications of specific divisions of labor and working relationships.

Jour 5501 Communication, Public Opinion, and Social Media  
3 credit(s);  
Instructor: Watson, Brendan R  
Description: This course examines the theories of communication that underlie public opinion processes and effects. We will analyze the meaning of public opinion and its methods of inquiry; we will investigate psychological and sociological theories that inform the opinion process and study their role in persuasion and attitude change. We will examine the function of media and interpersonal communication on opinion formation, and we will use these theoretical frameworks to understand current public opinion issues and campaigns. We will also examine the role of social media and digital media analytics as tools for both measuring and attempting to influence public opinion.

Jour 5541 Mass Communication and Public Health  
3 credit(s);  
Instructor: STAFF  
Description: This course is designed to provide an overview of theory and research regarding the intersection of information available via mass media outlets and various aspects of public health. In this course we examine the potential impact of media content on public health outcomes both as a product of individual? s everyday interaction with media and as a result of strategic use of media-based efforts to accomplish public health goals. Discussion will emphasize both planned and unplanned effects of mass media in a variety of health-related situations.  
Style: 25% Lecture, 25% Discussion, 25% Laboratory.  
Grading: 25% mid exam, 25% final exam, 10% special projects, 20% quizzes, 10% in-class presentation, 10% class participation.  
Exam Format: translations, multiple choice, oral-drills

Jour 5615 History of the Documentary  
3 credit(s);  
Instructor: Schwartz, Dona  
Description: This course examines the invention of photographic media and their use as representations that truthfully document reality. Rather than emphasize a historical progression we will focus on several topical issues within a historical framework. These issues include the truth-value of factual versus fictive representations, the influence of political and economic contexts on the form and content of documentary work, the convergence of formerly distinct realms of media practice, and the role of the media maker with respect to the role of the subject. In addition, the course will examine the
aesthetic dimensions of documentary photography and film, investigating the questions, ?what do documentaries look like?? and ?why do they look the way they do?? Screenings of landmark films and photographs are a crucial component of the course. Lectures and discussions will supplement and provide context.

**Jour 5725 Management of Media Organizations**

- **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 anwer and essay

**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. Though 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

**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.

**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.

**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.

**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.

**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-Stern, Shayla
- Description: Student may contact the instructor or department for information.

**Jour 8001 Studies and Theories of Mass Communication**
- A-F only, 3 credit(s);
- Instructor: Huh, Jisu
- 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);
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: Rim, Hyejoon
Description: Student may contact the instructor or department for information.

Jour 8501 Seminar: The Process of Quantitative Mass Communication Research
A-F only, 3 credit(s);
Instructor: Ball, Jennifer
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 8501 Seminar: Mass Media and Social Change
A-F only, 3 credit(s);
Instructor: Watson, Brendan R
Description: Student may contact the instructor or department for information.

Jour 8679 Seminar: Research Methods in Media Ethics and Law
A-F only, 3 credit(s);
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: 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.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
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: Lewis, Seth Corwin  
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: Leard, David Allen  
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: Rodgerson PhD, Richard W  
Description: Student may contact the instructor or department for information.

3 credit(s), max credits 4; Meets CLE req of Global Perspectives  
Instructor: Dengel PhD, Donald Robert  
Description: Student may contact the instructor or department for information.

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.  
Style: 80% Lecture, 15% Discussion.  
Grading: 14% mid exam, 14% final exam, 29% reports/papers, 3% quizzes, 23% written homework, 10% reflection paper, 7% in-class presentation.  
Exam Format: Multiple choice / T-F

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: Leard, David Allen  
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);
Kin 3126W Sport and Exercise Psychology
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Osgood, Chad Thomas

Kin 3131W History and Philosophy of Sport
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Weiss, 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: Holst-Wolf, Jessica
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 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 3179 Track and Field Coaching Theory and Skill Development
A-F only, 2 credit(s);
Instructor: Lundstrom, Christopher J
Description: Coaching theory and skill development necessary to coach track and field.

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
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.

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.

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.

Kin 3696 Supervised Practical Experience  
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;  
Instructor: Buysse PhD,Jo Ann  
Description: Student may contact the instructor or department for information.

Kin 3696 Supervised Practical Experience  
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;  
Instructor: Vollum,Matt  
Description: Student may contact the instructor or department for information.

Kin 3696 Supervised Practical Experience  
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;  
Instructor: Ingraham PhD,Stacy Jean  
Description: Student may contact the instructor or department for information.

Kin 3696 Supervised Practical Experience  
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;  
Instructor: Stirling,Sue  
Description: Student may contact the instructor or department for information.

Kin 3696 Supervised Practical Experience  
S-N only, 1-10 credit(s), max credits 10, 10 completions allowed;  
Instructor: Richardson PhD,Tiffany  
Description: Student may contact the instructor or department for information.

Kin 3982 Research Methods in Kinesiology  
A-F only, 3 credit(s);  
Instructor: Lewis PhD,Beth Ann  
Description: Student may contact the instructor or department for information.

Kin 3982 Research Methods in Kinesiology  
A-F only, 3 credit(s);
Kin 3982 Research Methods in Kinesiology
- A-F only, 3 credit(s);
- Instructor: Gao PhD, Zan
- 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: Biltz MD, George R
- 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: Rodgerson PhD, Richard W
- 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: Buysse PhD, Jo Ann
- 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: Lewis PhD, Beth Ann
- 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: Vollum, Matt
- 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: LaVoi PhD, Nicole Marie
- 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: Ingraham PhD, Stacy Jean
- 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: Allison JD, Rayla
- 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: Leon MD, Arthur S
- 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: Kane PhD, Mary Jo
- 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: Smith, Thomas J
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: Wiese-Bjornstal PhD, Diane M.
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: Konczak PhD, Juergen
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: Dengel PhD, Donald Robert
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: 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: 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: Ross PhD, Stephen
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: Kihl PhD, Lisa A
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: Weiss PhD, Maureen
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: Richardson PhD, Tiffany
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: 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: Ross PhD, Stephen
Description: Student may contact the instructor or department for information.

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 4136 Embodied Cognition
A-F only, 3 credit(s);
Instructor: Stoffregen PhD, Thomas
Description: Introduction to relations between physical behavior and mental activity including cognitive, emotional, and social aspects. Concepts of embodied cognition, their relation to traditional concepts of mind/body. Lifespan development, empirical research.

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-genic 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 4441 Movement Neuroscience
A-F only, 3 credit(s), max credits 6;
Instructor: Elangovan, Naveen
Description: Student may contact the instructor or department for information.
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 4641 Training and Conditioning for Sport
A-F only, 3 credit(s);
Instructor: Rhodes, Greg
Description: Physiology/methodology of training/conditioning athletes. Students construct training/conditioning programs for athletes. Different components that enhance training adaptation.

Kin 4697 Student Coaching and Seminar
S-N only, 3 credit(s);
Instructor: Ingraham PhD, Stacy Jean
Description: Student may contact the instructor or department for information.

Kin 4941 Applied Sport Science
OPT No Aud, 3 credit(s);
Instructor: Kask, Jason G
Description: Student may contact the instructor or department for information.

Kin 4981 Understanding Kinesiology Research
A-F only, 3 credit(s);
Instructor: STAFF
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 developmental 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.

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

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.

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

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, 35% final exam, 5% special projects, 10% quizzes. # comprehensive exams
Exam Format: Multiple choice and short answer

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/adapted 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: Kihl PhD, Lisa A
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 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: Applied Sport Movement Analysis & Field Technology
3 credit(s), max credits 8, 8 completions allowed;
Instructor: Bosch, Tyler A
Description: Student may contact the instructor or department for information.

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 sportsmedicine
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: Loher JD,Vickie Lynn
Description: Legal issues related to recreation, park, and sport programs/facilities with public/private sectors.

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
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: 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: 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;
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: 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 5992 Readings in Kinesiology**
A-F 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.

**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**
Kin 8122 Seminar: Exercise Physiology
- A-F only, 2-6 credit(s), max credits 6, 1 completion allowed;
- Instructor: Biltz MD, George R
- Description: Student may contact the instructor or department for information.

Kin 8132 Seminar: Motor Development
- A-F only, 3 credit(s);
- Instructor: Konczak PhD, Juergen
- 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: Student may contact the instructor or department for information.

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, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: Biltz MD, George R
- Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
- S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: Lewis PhD, Beth Ann
- Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
- S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: LaVoi PhD, Nicole Marie
- Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
- S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: Ingraham PhD, Stacy Jean
- Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
- S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: Allison JD, Rayla
- Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
- S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: Leon MD, Arthur S
- Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
- S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
- Instructor: Kane PhD, Mary Jo
- Description: Student may contact the instructor or department for information.
Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 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, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Konczak PhD, Juergen
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Dengel PhD, Donald Robert
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 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, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Stoffregen PhD, Thomas
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Ross PhD, Stephen
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Kihl PhD, Lisa A
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Weiss PhD, Maureen
Description: Student may contact the instructor or department for information.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 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, 1-12 credit(s), max credits 12, 12 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); 1012 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); 3022 Credit will not be granted if credit has been received for: KOR 4005;
Instructor: Ahn, Minhw a
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); Grad student 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); 4002, grad student 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
Kor 4041 Advanced Readings in Modern Korean
Credit(s): 4
Instructor: Cho, Hangtae
Description: Student may contact the instructor or department for information.

Kor 5140 Readings in Sino-Korean Texts
Credit(s): 3, 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 439 Borlaug Hall

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 5425 Atmospheric Processes I: Thermodynamics and Dynamics of the Atmosphere
A-F only, 3 credit(s)
Instructor: Snyder, Peter K
Description: Student may contact the instructor or department for information.

LAAS 8128 Land and Atmospheric Science Seminar
S-N only, 1.5 credit(s), max credits 3
Instructor: Toner, Brandy Marie
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: Nater, Ed
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: Chevalier, Tony
Description: Student may contact the instructor or department for information.

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: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 1301 Introduction to Landscape Architecture Drawing
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Larson, John Alfred
Description: Student may contact the instructor or department for information.

LA 1301 Introduction to Landscape Architecture Drawing
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Koepeke, John Albert
Description: Student may contact the instructor or department for information.

LA 1301 Introduction to Landscape Architecture Drawing
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Agee, Bradley Steele
Description: Student may contact the instructor or department for information.

LA 2301 Advanced Representation for Environmental Design
3 credit(s);
Instructor: Larson, John Alfred
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: de Britto, Vincent P
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: Siebenaler-Ransom, Anthony J
   Description: Student may contact the instructor or department for information.

LA 5001 Sustainable Landscape Design and Planning Practices
   3 credit(s); 5201, 5203 Credit 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: de Britto, Vincent P
   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: Pitt, David George
   Description: Student may contact the instructor or department for information.

LA 5374 Representation for Landscape Architectural Construction
   3 credit(s);
   Instructor: de Britto, Vincent P
   Description: Student may contact the instructor or department for information.

LA 5376 Representation I
   A-F only, 4 credit(s), max credits 8; Master of Landscape Architecture (MLA) or Accelerated Bachelor of Environmental Design. Credit will not be granted if credit has been received for: ARCH 2301;
   Instructor: de Britto, Vincent P
   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: Koepke, 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: Agee, Bradley Steele
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 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 5402 Directed Studies in Landscape Architecture History and Theory
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 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.

LA 5403 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 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: Pitt, David George
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: 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: Krinke, Rebecca Jean
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: Koepeke, John Albert
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: Galatowitsch, Susan M
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: Pitt, David George
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: Neckar, Lance M
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: 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: 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: 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: Gunderson, Robert James
Description: Student may contact the instructor or department for information.

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: Siebenaler-Ransom, Anthony J
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: 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: de Britto, Vincent P
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;
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.

LA 8402 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 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 8402 Directed Studies in Landscape Architecture History and Theory
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 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
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: 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 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 Design
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: 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: 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: Galatowitsch, Susan 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: 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 8405 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 8554 Project Programming
A-F only, 1 credit(s);
Instructor: de Britto, Vincent P
Description: Student may contact the instructor or department for information.

LA 8574 Landscape Storm Water Management
A-F only, 3 credit(s);
Instructor: Favour, Joseph Richard
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
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:

Lat 5100 Advanced Reading: Livy
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Smith, Stephen
Description: When the historian Livy (Titus Livius, 43 BCE-17 CE) was composing his great work "Ab urbe condita," he was concerned not so much to establish as accurate an account as possible of Rome's past as to set forth examples of what he considered Roman, and un-Roman, behavior, examples to emulated or avoided by his contemporaries. While this does not present a particular problem for what was then the second half of Rome's history, a period for which the city's official records were still available, the first half of that history is a different matter: when the Gauls sacked Rome around 390 BCE, those records had been destroyed, and later writers had to rely on the oral accounts of the great families to reconstruct the history of Rome's first four centuries. Livy's account of those years is thus a bit more troublesome as a source of "facts," and historians have been by and large more comfortable with his narration of post-390 events. This is not to say that his history of 754/3-390 is completely untrustworthy, but to suggest that for that period Livy is more interested in the stories as stories than in what we would consider history. In this course we will be looking at Livy's first five books, reading Book 1 in its entirety in Latin and Books 2-5 in English. In order to better understand his narrative technique, we will also be reading (in English) selections from Herodotus' history of the Persian Wars and the "Roman Antiquities" of Dionysius of Halicarnassus, as well as representative samples of contemporary Livian scholarship.

Lat 5800 Sight Reading for Graduate Students
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Cole, Spencer E
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 8910 Seminar: Pastoral
3 credit(s), max credits 30, 10 completions allowed;
Instructor: Krevans, Nita
Description: Student may contact the instructor or department for information.

Lat 8910 Seminar: Epistolography
3 credit(s), max credits 30, 10 completions allowed;
Instructor: Gallia, Andrew B
Description: Student may contact the instructor or department for information.

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: Chambers, Sarah C
Description: In 1519, Spaniard Hernan Cortes entered the dazzling capital city of the Mexica (Aztec) empire; what happened next depends upon whose versions of events you read. European accounts emphasize his daring capture of emperor Moctezuma and his rapid domination of central Mexico by the use of his wits and superior technology. Native accounts reveal that the capture of Moctezuma backfired, leading to a lengthy and heroic defense of the island city. Regardless of the telling, such encounters and struggles set the stage for European rule of the Americas for the next three centuries. This course begins with pre-contact Native American societies, but primarily explores the historical processes of colonialism in Latin America (especially Mexico, Brazil and Peru) between 1492 and 1825. We will study both the
economic, religious, and administrative systems put in place by the Europeans, and the varied responses of indigenous peasants, African slaves, racially-mixed towndwellers, and women. We will learn to analyze primary documents from the period (such as the competing accounts of the conquest of Mexico) and read life stories as well as historical narratives. All students register for a discussion section.

**Style:** 65% Lecture, 35% Discussion.

**Grading:** 20% final exam, 50% reports/papers, 15% quizzes, 15% class participation.

**Exam Format:** i.d. terms and short essays

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**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: CUELLAR CUELLAR, PAULA SOFIA

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

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**Law School 285 Mondale Hall**

**Law 6001 Contracts**

A-F only, 4 credit(s);

Instructor: Matheson, John H

Description:

**Law 6001 Contracts**

A-F only, 4 credit(s);

Instructor: Bix, Brian H

Description:

**Law 6001 Contracts**

A-F only, 4 credit(s);

Instructor: Gross, Oren

Description:

**Law 6001 Contracts**

A-F only, 4 credit(s);

Instructor: Okediji, Ruth L

Description:

**Law 6001 Contracts**

A-F only, 4 credit(s);

Instructor: Schwarcz, Daniel

Description:

**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:

**Law 6005 Torts**

A-F only, 4 credit(s);

Instructor: Feld, Barry C

Description:

**Law 6005 Torts**

A-F only, 4 credit(s);

Instructor: Klass, Alexandra B.
Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Kritzer, Herbert M
Description:

Law 6005 Torts
A-F only, 4 credit(s);
Instructor: Roberts, Christopher Nigel
Description:

Law 6006 Civil Procedure
A-F only, 3-6 credit(s), max credits 12;
Instructor: STAFF
Description:

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:

Law 6014 Constitutional Law II
A-F only, 3 credit(s);
Instructor: Kitrosser, Heidi
Description:

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 6027 Law of the Sea
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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:

Law 6034 Sem: Women's Legal History
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6037 Seminar: Nanotechnology and Society
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.

Law 6039 Great Cases
A-F only, 3 credit(s);
Instructor: Stein, Robert A
Description:

Law 6049 Unincorporated Business Associations
A-F only, 3 credit(s);
Instructor: Sandberg, Christopher K
Description:

Law 6051 Business Associations/Corporations I
A-F only, 4 credit(s);
Instructor: STAFF
Description:

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 6060 Assisted Reproduction and the Family
A-F only, 3 credit(s);
Instructor: Carbone, June Rose
Description:

Law 6061 Financial Regulation
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: McDonnell, Brett H
Description:

Law 6063 Law and Neuroscience
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Shen, Francis Xavier
Law 6100 Taxation I
   A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: STAFF
   Description:

Law 6106 Federal Tax Procedure
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6107 Bankruptcy
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description:

Law 6115 Civil Discovery: Theory and Practice
   A-F only, 2 credit(s);
   Instructor: Roen, Craig Matthew
   Description:

Law 6117 CL: Civil Rights Enforcement
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: Brooker, Gregory Guy
   Description:

Law 6118 CL: Criminal Defense Appeals
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6119 CL: Criminal Prosecution Appeals
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: Brown, David Craig
   Description:

Law 6151 Estate Planning
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description:

Law 6152 Federal Jurisdiction
   A-F only, 3 credit(s);
   Instructor: Tostrud, Eric
   Description:

Law 6153 Wills and Trusts
   A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
   Instructor: STAFF
   Description:

Law 6159 Education Law and Policy
   A-F only, 3 credit(s);
   Instructor: STAFF
   Description:

Law 6215 Environmental Law
   A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description:

Law 6216 European Union Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ni Aolain, Fionnuala
Description:

Law 6218 Criminal Procedure
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6219 Evidence
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description:

Law 6220 Poverty Law
A-F only, 3 credit(s);
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
Description:

Law 6231 Seminar: Patent Prosecution Practice
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6234 Natural Resources
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6236 Indian Law
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6241 First Amendment Law
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6245 Interviewing, Counseling, and Negotiating
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6247 Depositions
Law 6402 Food and Drug Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6600 Professional Responsibility
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6601 International Business Transactions
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6602 International Law
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6603 Intellectual Property
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description:

Law 6604 Family Law
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6606 Administrative Law
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6609 International Intellectual Property
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6613 Copyright
A-F only, 3 credit(s);
Instructor: Okediji, Ruth L
Description:

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:
Law 6631 Employment Discrimination
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description:

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 6635 Seminar: European Legal Systems
A-F only, 2 credit(s);
Instructor: STAFF
Description: 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 6645 Feminist Legal Theory
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 6702 Seminar: Legal History Workshop
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Blumenthal,Susanna Lynn
Description:

Law 6704 Seminar: Mass Torts: What They Are and How To Resolve Them
A-F only, 2 credit(s);
Instructor: Zimmerman,Charles Selger
Description:

Law 6705 Seminar: Information Governance
A-F only, 2 credit(s);
Instructor: Ragan,Charles Ransom
Description:

Law 6707 Seminar: Intellectual Property Transactions
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Brown,Gregory C.
Description:

Law 6801 Seminar: Death Penalty
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6807 Seminar: Law of Coops
A-F only, 2 credit(s);
Instructor: Kopka,Christopher J
Description:

Law 6810 MBA Concepts for Lawyers
A-F only, 2 credit(s);
Instructor: Adams,Edward Scott
Description:
Law 6811 Seminar: Complex Litigation
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description:

Law 6814 Seminar: RICO
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6816 Seminar: State Constitutional Law
   A-F only, 2 credit(s);
   Instructor: Schultz, David A
   Description:

Law 6823 Sem: Investment Banking
   A-F only, 2 credit(s);
   Instructor: Nicholson, Eric Mathew
   Description:

Law 6828 Law and Cultural Property Seminar
   A-F only, 2 credit(s);
   Instructor: Wold, Barbara N
   Description:

Law 6830 Seminar: Corporate Counsel
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6834 Seminar: Habeas Corpus
   A-F only, 2 credit(s);
   Instructor: Thompson, Peter
   Description:

Law 6837 Seminar: Contract Drafting
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6848 Seminar: Art of Appelate Advocacy
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6857 Corporate Tax
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: STAFF
   Description:

Law 6868 Seminar: Business/Environmental Law
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:

Law 6870 Seminar: Negotiations
   A-F only, 2 credit(s);
   Instructor: STAFF
   Description:
Law 6873 Seminar: Nonprofit Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6875 Seminar: Law, Health, and Life Sciences
S-N only, 0.5-1 credit(s), max credits 1, 1 completion allowed;
Instructor: STAFF
Description:

Law 6880 Seminar: Election Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6883 Seminar: Contemporary Issues Facing Courts
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6884 Seminar: Comparative Constitutional Law
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6886 International Human Rights Law
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6897 Seminar: Game Theory
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6906 Seminar: Public Law Workshop
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6909 Seminar: Criminalization
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: STAFF
Description:

Law 6910 Seminar: Islamic Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6911 Seminar: International Commercial Arbitration
A-F only, 2 credit(s);
Instructor: Klaas, Paul Barry
Description: Student may contact the instructor or department for information.

Law 6912 Seminar: Law Firm Practice and Management
A-F only, 2 credit(s);
Instructor: Elsass, Douglas L
Description:
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:

Law 6918 Seminar: Rule of Law
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 7000 CL: Civil Practice
A-F only, 1-7 credit(s), max credits 7;
Instructor: STAFF
Description:

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 CL: Insurance Law Clinic
A-F only, 2-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Brownell, Margo
Description:

Law 7010 CL: 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: Coleman, Jean Lynn
Description:

Law 7015 CL: 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 7020 CL: Special Education Law
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description:

Law 7030 CL: Consumer Protection
A-F only, 3-4 credit(s), max credits 8;
Instructor: STAFF
Description:
Law 7031 CL: Consumer Protection Directors
- A-F only, 2-3 credit(s), max credits 6;
- Instructor: STAFF
- Description:

Law 7040 CL: Community Mediation
- A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
- Instructor: Bulman, Karmit Julie
- Description:

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 7075 International Moot Court
- A-F only, 1-3 credit(s), max credits 3;
- 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
- Description:

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:

Law 7400 CL: Human Rights Litigation and International Legal Advocacy
- A-F only, 3-7 credit(s), max credits 14;
- Instructor: Green, Jennifer Mary
- Description:

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: Criminal Justice
- A-F only, 3-6 credit(s), max credits 6, 1 completion allowed;
- Instructor: Smiley, Nicole Patricia
- Description:

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:

Law 7750 CL: Community Practice and Policy Development  
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.

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 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:

Learning and Academic Skills 340 Appleby Hall

LASk 1001 Mastering Skills for College Success  
2 credit(s);  
Instructor: Duffy, Corry  
Description: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success  
2 credit(s);  
Instructor: Quanbeck, Jo  
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: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success  
2 credit(s);  
Instructor: Li, Ziqiu  
Description: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success  
2 credit(s);
Instructor: Wilson, Robert Joseph
Description: Student may contact the instructor or department for information.

LASk 1101 Academic Refresher
S-N only, 1 credit(s);
Instructor: Wilson, Robert Joseph
Description: Student may contact the instructor or department for information.

LASk 1102 Academic Success
S-N only, 2 credit(s), max credits 4;
Instructor: Dade, Shari N.
Description: Student may contact the instructor or department for information.

LASk 1102 Academic Success
S-N only, 2 credit(s), max credits 4;
Instructor: Kim, Ryoka
Description: Student may contact the instructor or department for information.

LASk 1102 Academic Success
S-N only, 2 credit(s), max credits 4;
Instructor: Li, Ziqiu
Description: Student may contact the instructor or department for information.

Liberal Studies 20 Ruttan Hall

LS 5100 Liberal Studies Seminar: The Documentary Impulse
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Galt, Margot Kriel
Description: Often we document what we are afraid will pass away. But many media and scholarly pursuits also use documentary methods to capture material for future study. This course will explore the development of documentary photography, virtually along with the development of the medium itself. Oral history, as a tool for the historian and the dramatist. Films whose aim was to document (and highlight) changes in nature or human life, especially during times of environmental or human-induced stress (such as films about the Dust Bowl or the Great Depression). We will also investigate how creative writers have used oral history, and the interpretation of documentary photography to gain insights and inspiration for rendering past and present. Finally we will put on our historian's class and learn how to use documents (not originally intended to assist the historian) to help open our eyes and hearts to the past.

LS 5100 Liberal Studies Seminar: Introduction to Innovation
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Tomsyck, John Peter
Description: 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. <iframe src="http://oca.cce.umn.edu/IS-5001-LS-5100_Intro/index.html" border="0" align="middle" height="411" scrolling="no" width="581"> Please click class URL to view the syllabus.

LS 5100 Liberal Studies Seminar: 21st Century Questions
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Neraas, Julie
Description: In some of the world's great stories everything depends upon asking the right question. Certain questions test the truth of our lives: who is my neighbor? What happens after we die? What does true patriotism look like? Some questions are timeless, others are unique to a particular time in history. In this course we reflect together on these questions: Can we learn to resolve our problems non-violently? What might it mean for the United States to be a good neighbor to Mexico? What does democracy require of us? How can our food systems benefit the most people, while treading lightly on the earth? How can we serve The Larger Story? What would a global spirituality look like in our global world? What can we celebrate that IS right with the world even now? Students choose an additional question that is of interest to them. We will learn from: theologians, environmentalists, writers, poets. Mexican migrant workers, experts on food systems, a cosmologist, and more.

LS 5100 Liberal Studies Seminar: Whole Brain Innovation
A-F only, 2 credit(s), max credits 24, 24 completions allowed;
Instructor: Kumaraea,Araela
Description: Student may contact the instructor or department for information.

**LS 5950 Special Topics: Personal Renewal for Work and Change**
A-F only, 1 credit(s), max credits 12, 3 completions allowed;
Instructor: Lloyd,Roseann
Description: Explore ways to slow down and really see the world around us. One premise of these exercises is that fresh observation of the world can lead us out of our own obsessions and burdens. Another premise is that taking pleasure in the world can lead us to renewal for work and change. Beginning with a discussion about slowing down to see, we'll then proceed with exercises in and out of the classroom: writing practice, sitting and looking (in contrast to sitting with eyes closed in traditional meditation), and the golden ribbon exercise (from John Caddy and Joe Paddock's work with ecology) as many writers refer to their writing as a meditative practice; then transition to "freewriting" as described by Natalie Goldberg. Later, we'll create more images by drawing a mandala and create longer poems from memories and the poem by Nazim Hiket "Things I Didn't Know I Loved." Weather permitting, we'll revisit our golden ribbon outside before adjourning. This one credit course meets for one day and has some online work and a paper due 3 to 4 weeks later.

**LS 8001 Introduction to Interdisciplinary Inquiry**
A-F only, 3 credit(s);
Instructor: Gustafson,DonnaMae 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 8001 Introduction to Interdisciplinary Inquiry**
A-F only, 3 credit(s);
Instructor: Gonzalez,Anita
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: Student may contact the instructor or department for information.

**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 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
**Ling 3001 Introduction to Linguistics**

- **Credit(s):** 4 credit(s); Credit will not be granted if credit has been received for: LING 3001H
- **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), 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**

- **Credit(s):** A-F only, 4 credit(s); Honors candidate or instr consent
- **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**

- **Credit(s):** 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**

- **Credit(s):** 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**

- **Credit(s):** 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 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

**Ling 4201 Syntax I**
3 credit(s); 3001 or 3001H or 5001 or instr consent
Credit will not be granted if credit has been received for: LING 5201;
**Instructor:** Hunter, Tim
**Description:** Student may contact the instructor or department for information.

**Ling 4202 Syntax II**
3 credit(s); 4201 or 5201
Credit will not be granted if credit has been received for: LING 5202;
**Instructor:** Halpert, Claire Danielle
**Description:** Student may contact the instructor or department for information.

**Ling 4303 Phonology II**
3 credit(s); Ling 4302W
Credit will not be granted if credit has been received for: LING 5303;
**Instructor:** Karvonen, Daniel
**Description:** Student may contact the instructor or department for information.

**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 developmental and 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

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

**Ling 5105 Field Methods in Linguistics I**
4 credit(s);
**Instructor:** Halpert, Claire Danielle
**Description:** Student may contact the instructor or department for information.

**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:** Lubowicz, Anna

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

**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:** Sheldon PhD, Amy

**Description:** Students will videotape a 30-45 minute conversation that they are a participant in at the beginning of the course. You will apply concepts from our readings on selected topics in the analysis of spoken discourse to short excerpts from your recording. These will be presented in an informal workshop format for discussion with the class. Small projects involving transcription, software use where relevant, and applications will prepare you for a longer more complex term project with your data. Recording equipment from OIT, recording space (if needed), and video storage at Media Mill will be provided. The content of the course can be shaped by student interest to the extent possible.

**Ling 5900 Topics in Linguistics: Japanese Language and Food**

3 credit(s), max credits 12, 3 completions allowed;

**Instructor:** Szatrowski, Polly Ellen

**Description:** LING5900 (LEC002) Topics in Linguistics: Japanese Language and Food (Polly Szatrowski) According to the BBC World News (Nov. 17, 2009), Tokyo is the "best place to eat", having 160,000 restaurants, and the most Michelin 3-star restaurants in the world. Japan is presently experiencing a food boom as shown by the great number of restaurants featuring cuisine from all over the world in Tokyo and the numerous cooking and eating shows on Japanese television. The Japanese language has developed many ways to talk about food, including many cooking terms and special expressions for the tastes, textures, smells, visual features, and sounds associated with food. In this course, we will address the following questions: 1) How do Japanese people organize their language and bodies around food, i.e., how do they use them to get to and from the table, and to proceed in a meal (e.g., at a sushi restaurant)? 2) How is the Japanese language used to taste, identify and assess food, and how do these fine distinctions and discriminations relate to the Japanese identity? 3) How do Japanese people talk about their experience of food and tell stories about food? 4) What linguistic forms and metaphors does the Japanese language have for food and how does the use of the Japanese language in the context of food relate to gender? 5) How is the Japanese language used to socialize children around food? We will explore the relation between the Japanese language and food by analyzing actual Japanese conversations about and while eating a variety of foods. The class will be most rewarding for students who like to cook/eat, talk about food, and educate their palate. PREREQUISITES: LING 3001 or 3001H or 5001 AND JPN 1012, OR permission of the instructor.

**Style:** 40% Lecture, 30% Discussion, 30% Student Presentation.

**Grading:** 30% in-class presentation. 40% Major paper, abstract, presentation 30% Written homework and data collection.

**Ling 5900 Topics in Linguistics: Categories, Metaphor and the Mind**

3 credit(s), max credits 12, 3 completions allowed;

**Instructor:** Szatrowski, Polly Ellen

**Description:** LING5900-Sec001: CATEGORIES, METAPHOR AND THE MIND In this course we will explore the relation between categories, metaphor and the mind. We will review methods of categorization including family resemblance, markedness, and prototypes, and examine the notion of frames in relation to socio-cultural phenomena. We will address the question of how metaphor and categories shape and are shaped by perception, embodied behavior and thought, and the relation between thought, language and culture. The data will come from categories and metaphors for color, food, language, tense-aspect, emotions, thinking, space, etc. in a variety of languages, including English, Japanese, French,

Style: 30% Lecture, 40% Discussion, 30% Student Presentation.
Grading: 50% written homework, 25% in-class presentation, 25% class participation.

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: Szatrowski,Polly Ellen
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: Lubowicz,Anna
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: Halpert,Claire Danielle
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: Hunter,Tim
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 8820 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: Soh, Hooi Ling
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.

Ling 8991 Independent Study
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Hunter, Tim
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: Shah, Pri Pradhan
Description: Student may contact the instructor or department for information.

Mgmt 1001 Contemporary Management
A-F only, 3 credit(s);
Instructor: Li, Min
Description: Student may contact the instructor or department for information.

Mgmt 1001 Contemporary Management
A-F only, 3 credit(s);
Instructor: Yu, Lingtao
Description: Student may contact the instructor or department for information.

Mgmt 1001 Contemporary Management
A-F only, 3 credit(s);
Instructor: Frear, Kate
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 1005 Corporate Responsibility and Ethics
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Park, Rand
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: Online
Grading: See attached syllabus

Mgmt 3001 Fundamentals of Management
A-F only, 3 credit(s);
Instructor: Bapna, Sofia
Description: Student may contact the instructor or department for information.

Mgmt 3001 Fundamentals of Management
A-F only, 3 credit(s);
Instructor: Kumar, Pankaj
Description: Student may contact the instructor or department for information.

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.

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.

Mgmt 3033W Business Communication
A-F only, 3 credit(s); Fr composition, CSOM upper-div, at least 60 cr credit will not be granted if credit already received for: BA 3033W or 3033V Credit will not be granted if credit has been received for: IBUS 3033W; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Mgmt 3033W Business Communication
A-F only, 3 credit(s); Fr composition, CSOM upper-div, at least 60 cr credit will not be granted if credit already received for: BA 3033W or 3033V Credit will not be granted if credit has been received for: IBUS 3033W; 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); Fr composition, CSOM upper-div, at least 60 cr credit will not be granted if credit already received for: BA 3033W or 3033VCredit will not be granted if credit has been received for: IBUS 3033W; 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:** Fox, Isaac J

**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:** Mullins, Kimberley

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

**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 4040 Negotiation Strategies**  
A-F only, 4 credit(s);  
Instructor: Duffy, Michelle Kathleen  
**Description:** Student may contact the instructor or department for information.

**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 4100 Topics in Management: STARTUP: Lean Venture Development**  
A-F only, 2 credit(s), max credits 8;  
Instructor: Nord, Tobin Lawrence  
**Description:** Student may contact the instructor or department for information.

**Mgmt 4170W New Business Feasibility and Planning**  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Beil, Frank J  
**Description:** This course takes students through the process of new business opportunity identification and development. Students will identify and assess new business opportunities, by conducting feasibility analyses, and will further develop a new business idea through the creation of a formal business plan. The course involves a significant amount of outside work, as students are required to gather information about the feasibility of a particular business idea not only through the acquisition of secondary data but also by contacting potential customers, suppliers and other sources of primary data relevant to their business idea. The course also involves writing skills development, as it pertains to the production of a business plan, as students are required to produce a feasibility analysis documents as well as several drafts and a final version of a formal business plan.

**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: Benraouane, Sid Ahmed
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 6004 Negotiation Strategies
A-F only, 2 credit(s);
Instructor: Frear, Kate
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);  
Instructor: Spruth,Steve  
Description: Student may contact the instructor or department for information.

Mgmt 6084 Management of Groups  
A-F only, 2 credit(s);  
Instructor: Madzar,Svjetlana  
Description: Student may contact the instructor or department for information.

Mgmt 6084 Management of Groups  
A-F only, 2 credit(s);  
Instructor: Benraouane,Sid Ahmed  
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 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: STARTUP: Lean Venture Development  
A-F only, 2 credit(s), max credits 4;  
Instructor: Nord,Tobin Lawrence  
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 6402 Integrative Leadership: From Theory to Practice  
A-F only, 3 credit(s);MBA studentCredit will not be granted if credit has been received for: PA 5105;  
Instructor: White,Katie Marie  
Description: This is an interdisciplinary, 3-credit seminar led by co-instructors from multiple schools of the university. Students will: a) learn to recognize and diagnose integrative leadership challenges and opportunities; b) build their own capacities to practice integrative leadership through group work in individualized peer-to-peer coaching in diverse teams and through being exposed to a range of boundary work practices; and c) gain better knowledge of the leadership contexts within their own profession and in other sectors. We emphasize contexts for integrative leadership at five basic levels: within individuals, within and across groups, within and across organizations, within and across sectors, and at the societal scale. Learning occurs through reading foundational materials, personal leadership coaching, engaging extensively with examples from guest speakers and case materials, developing a group capstone project on integrative leadership, and iteratively co-producing an understanding of what integrative leadership is. This course is sponsored by four departments. If PA 5105 shows as full, please check for space under the other departments - MGMT 6402, OLPD 6402, and PubH 6702. They are all for the same class, with the same instructors, meeting at the same time. Every section in all four schools must be filled before any over-ride permission numbers are issued. If all class sections are full, please contact Merrie Benasutti at the Center for Integrative Leadership (624-8300) for a permission number.
Mgmt 6410 Corporate Responsibility
A-F only, 2 credit(s);
Instructor: Shaver, Myles
Description: Student may contact the instructor or department for information.

Mgmt 8302 Seminar in Organizations Theory
4 credit(s);
Instructor: Benner, Mary Jo
Description: Student may contact the instructor or department for information.

Mgmt 8401 Seminar in Strategy Content
4 credit(s);
Instructor: Toh, PK
Description: Student may contact the instructor or department for information.

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.

Management of Technology  290 McNamara Center

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
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 3:00 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.

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**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.

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**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:** Online
- **Grading:** See attached syllabus

**MM 3205 Engineering for Manufacturing Operations**

- **A-F only, 3 credit(s);**
- **Instructor:** Schiveley, Steven Charles
- **Description:** Foundational mechanical, electrical, industrial, and manufacturing engineering concepts/techniques essential to manufacturing operations management. Collaborating with other functional departments in enterprise to develop and maintain effective/efficient manufacturing operations. Production strategies for quality, safety, and time/cost efficiency. Allocation of resources, productivity, cost analysis.

**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:** See attached syllabus

**MM 4102 Manufacturing Operations**

- **A-F only, 3 credit(s);**
- **Instructor:** McNamara, Dan 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 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:** Online
- **Grading:** 7% problem solving. See attached syllabus

**MM 4201 Quality Engineering and Process Improvement**

- **A-F only, 3 credit(s);**
- **Instructor:** Begich, Michael Daniel
- **Description:** 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
Marketing 3-150 Carlson School of Management

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: Van Etten, Julia A.
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: See attached syllabus
Exam Format: Online exams

Mktg 3001 Principles of Marketing
A-F only, 3 credit(s);
Instructor: Wang, Yajin
Description: Student may contact the instructor or department for information.

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: Werner, Seth E
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: Loken, Barbara
Description: Student may contact the instructor or department for information.

Mktg 3040 Buyer Behavior
A-F only, 4 credit(s);
Instructor: Lipe, Jay
Mktg 4030 Sales Management  
A-F only, 4 credit(s);  
Instructor: Mueller, Wayne G  
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: Student may contact the instructor or department for information.

Mktg 4082W Brand Management  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Lipe, Jay  
Description: Student may contact the instructor or department for information.

Mktg 6051 Marketing Research  
A-F only, 4 credit(s);  
Instructor: Van Etten, Julia A.  
Description: Student may contact the instructor or department for information.

Mktg 6055 Buyer Behavior  
A-F only, 4 credit(s);  
Instructor: Marinovich, John  
Description: Student may contact the instructor or department for information.

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

Mktg 6075 Pricing Strategy  
A-F only, 4 credit(s);  
Instructor: Werner, Seth E  
Description: Student may contact the instructor or department for information.

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 6090 Marketing Topics
A-F only, 2 credit(s), max credits 4;
Instructor: Hopkins, David K
Description: Student may contact the instructor or department for information.

Mktg 8810 Consumer Behavior Special Topics
A-F only, 2 credit(s);
Instructor: Griskevicius, Vladas
Description: Student may contact the instructor or department for information.

Mktg 8811 Consumer Attitudes and Persuasion I
2 credit(s);
Instructor: Meyers-Levy, Joan
Description: Student may contact the instructor or department for information.

Mktg 8812 Consumer Attitudes and Persuasion II
A-F only, 2 credit(s);
Instructor: Meyers-Levy, Joan
Description: Student may contact the instructor or department for information.

Master of Business Administration 2-210 Carlson School of Management

MBA 6030 Financial Accounting
A-F only, 3 credit(s);
Instructor: Shroff, Pervin Keki
Description: Student may contact the instructor or department for information.

MBA 6030 Financial Accounting
A-F only, 3 credit(s);
Instructor: Dey, Aliyesha
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 studentCredit will not be granted if credit has been received for: MGMT 6110;
Instructor: Mironski, Jacek
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.

MBA 6120 Data Analysis and Statistics for Managers
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: Cui, Tony Haitao
Description: Student may contact the instructor or department for information.

MBA 6210 Marketing Management
A-F only, 3 credit(s);
Instructor: Torelli, Carlos
Description: Student may contact the instructor or department for information.

MBA 6220 Operations Management
A-F only, 3 credit(s);
Instructor: Sinha, Kingshuk Kanti
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 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 6315 The Ethical Environment of Business**  
A-F only, 2 credit(s); 
**Instructor:** Park, Rand  
**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:** Gutterman, 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);
MBT 5346 ASC 740 Computations and Analysis  
A-F only, 2 credit(s);  
Instructor: Frank, Nicholas  
Description: Student may contact the instructor or department for information.

MBT 5363 Compensation and Benefits  
A-F only, 2 credit(s);  
Instructor: Clark, Keith H  
Description: This course covers executive compensation offered by companies (from small to large). Topics include an in-depth look at case studies to review the benefits and costs of benefit plans, focusing on retaining senior managers and executives; hiring senior managers and executives; compensation and benefit strategies.

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: Wilsey PhD, David Scott  
Description: Student may contact the instructor or department for information.

MDP 5100 International Field Seminar  
A-F only, 1 credit(s);  
Instructor: Johnstone, Christopher J  
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] majorsCredit will not be granted if credit has been received for: CHEN 1001;  
Instructor: Hackel, Benjamin J.  
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: Macosko, Chris
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: Flannigan, David James  
Description: Student may contact the instructor or department for information.

MatS 3011 Introduction to Materials Science and Engineering  
3 credit(s);  
Instructor: Flannigan, David James  
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 program Credit 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 3045 Materials Science and Engineering Industrial Internship  
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Francis, Lorraine F  
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 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 program Credit 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: Francis,Lorraine F
Description: Student may contact the instructor or department for information.

MatS 4221 Materials Performance
A-F only, 4 credit(s);
Instructor: Francis,Lorraine F
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 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 5353 Electron Microprobe Theory and Practice
3 credit(s);[One yr chem, one yr physics] or instr consent Credit will not be granted if credit has been received for: ESCI 5353;
Instructor: von der Handt, Anette
Description: Student may contact the instructor or department for information.

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: Holmes, Russell James
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: Holmes, Russell James
Description: Student may contact the instructor or department for information.

Mathematics 127 Vincent Hall

Math 1001 Excursions in Mathematics
3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Pylyavskyy, Pavlo
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
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: Kinney, Pat
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. Math 1031 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 1051, Precalculus I (3 credits). This course covers topics on solving equations and inequalities, and explores straight lines and functions in general. The functions discussed include exponential and logarithmic functions. You will learn to analyze certain functions and draw their graphs. 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 and basic probability concepts.
Style: Online with hand-written exams
Grading: See attached syllabus
Exam Format: Supervised, in-person exams

Math 1038 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 Credit will not be granted if credit has been received for: 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 Credit will not be granted if credit has been received for: 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: See attached syllabus
Exam Format: Supervised, in-person exams
Math 1090 College Algebra Short Course
A-F only, 1 credit(s);
Instructor: Bright, Jered Bryan
Description: Student may contact the instructor or department for information.

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 1111 College Algebra, Trigonometry, and Precalculus
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 1142 Short Calculus
4 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Corbett, John
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 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: See attached syllabus
Exam Format: Supervised, in-person (not online) exams

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: Math1155Credit 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.

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: Math1155Credit will not be granted if credit has been received for: MATH 1155; 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, analytic geometry, and trigonometry beyond the usual coverage found in a four-year high school mathematics program. In many places in the course, concepts are developed that will feed into calculus. Depending on your needs, this course can serve as a terminal course in mathematics or as a precursor to higher mathematics. It is designed to prepare students for the full
calculus sequence.

**Style:** This is a printed, correspondence section.

**Grading:** See attached syllabus

**Exam Format:** Supervised, in-person exams

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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

**Instructor:** Kan, Xingye

**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:** Bright, Jered Bryan

**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 1161 Statistics and Discrete Mathematics**

A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking

**Instructor:** Dame, Lorraine

**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.

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**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.

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**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

**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.

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**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

**Instructor:** Nash, Jennie Elizabeth

**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
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: See attached syllabus
Exam Format: Supervised, in-person exams

Math 1371 CSE Calculus I
4 credit(s); CSE or pre-bioprod 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-Bioprod/Biosys Engr Credit will not be granted if credit has been received for: MATH 1272;
Instructor: Nash, Jennie Elizabeth
Description: Student may contact the instructor or department for information.

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: Akhmedov, Anar
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 2161 Bioinformatics and Biostatistics
A-F only, 3 credit(s);
Instructor: Metzger, Kelsey Jean
Description: Student may contact the instructor or department for information.

Math 2161 Bioinformatics and Biostatistics
A-F only, 3 credit(s);
Instructor: Dame, Lorraine
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: See attached syllabus
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
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: See attached syllabus

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 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 3283W; Instructor: Richter, Wayne H
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: 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: Kim, Christopher
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-Bioprods/Biosys EngrCredit 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 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-Bioprods/Biosys EngrCredit will not be granted if credit has been received for: MATH 2263; Instructor: Faye, Gregory
Description: Student may contact the instructor or department for information.

Math 2573H Honors Calculus III
A-F only, 4 credit(s); Math 1572H, honors student and permission of University Honors ProgramCredit will not be granted if credit has been received for: MATH 2263; Instructor: Foo, Jasmine Yen-teng
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: Sperber, Steven I.
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: Yang, Bo
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: Vescelius, Doreen Karol
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: Moeckel, Richard B
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: Conn, Jack Frederi
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: Prikry, Karel L
Description: Student may contact the instructor or department for information.

Math 4281 Introduction to Modern Algebra
4 credit(s);
Instructor: Berkesch Zamaere, Christine
Description: Student may contact the instructor or department for information.

Math 4281 Introduction to Modern Algebra
4 credit(s);
Instructor: Butterfield, Jane
Description: Student may contact the instructor or department for information.

Math 4512 Differential Equations with Applications
3 credit(s);
Instructor: Faye, Gregory
Description: Student may contact the instructor or department for information.
Math 4567 Applied Fourier Analysis
4 credit(s);
Instructor: Ji,Liangyue
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 4603 Advanced Calculus I
4 credit(s);
Instructor: Hu,Wenqing
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: Yang,Jed
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: Marden,Albert
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: Bobkov,Sergey G
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: Jiang,Dihua
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: Nykamp,Duane Q
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Sverak,Vladimir
Description: Student may contact the instructor or department for information.
Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Moeckel, Richard B
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Fristedt, Bert
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Baxter, John Robert
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Rogness, Jonathan Peter
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Tolmasky, Carlos
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Nykamp, Duane Q
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Ashkenazi, Rina
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Lan, Kai-Wen
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Westerland, Craig Christopher
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: Frank, David L
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: Reitich, Fernando Leiva
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: Cockburn, Bernardo
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: 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: Sverak, Vladimir
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: Garrett, Paul
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: Krylov, Nicolai Vladimi
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: McGehee, Richard P
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: Weimerskirch, Mike
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: Bobkov, Sergey G
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: Musiker, Gregg Joseph
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: Mazzola PhD, Guerino
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: Mosher, Bryan
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: Stinis, Panos
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 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Witt, Emily E
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: Shemyakin, Arkady
Description: Student may contact the instructor or department for information.

Math 5075 Mathematics of Options, Futures, and Derivative Securities I
4 credit(s);
Instructor: Liu, Zhen
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
Math 5248 Cryptology and Number Theory
4 credit(s);
Instructor: Odlyzko, Andrew
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: Musiker, Gregg Joseph
Description: Student may contact the instructor or department for information.

Math 5248 Cryptology and Number Theory
4 credit(s);
Instructor: Wu, Chenyan
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: Stanton, Dennis W
Description: Student may contact the instructor or department for information.

Math 5335 Geometry I
4 credit(s);
Instructor: Fristedt, Bert
Description: Student may contact the instructor or department for information.

Math 5335 Geometry I
4 credit(s);
Instructor: Bou-Rabee, Khalid
Description: Student may contact the instructor or department for information.

Math 5345H Honors: Introduction to Topology
A-F only, 4 credit(s);
Instructor: Westerland, Craig Christopher
Description: Student may contact the instructor or department for information.

Math 5447 Theoretical Neuroscience
4 credit(s);
Instructor: Nykamp, Duane Q
Description: Student may contact the instructor or department for information.

Math 5485 Introduction to Numerical Methods I
4 credit(s);
Instructor: Shapeev, Alexander
Description: Student may contact the instructor or department for information.

Math 5535 Dynamical Systems and Chaos
4 credit(s);
Instructor: Saha, Rajarshi
Description: Student may contact the instructor or department for information.

Math 5583 Complex Analysis
4 credit(s);
Instructor: Hejhal, Dennis A
Description: Student may contact the instructor or department for information.

Math 5587 Elementary Partial Differential Equations I
4 credit(s);
Instructor: Calderer, Carme
Description: Student may contact the instructor or department for information.

Math 5587 Elementary Partial Differential Equations I
4 credit(s);
Instructor: Davey, E Blair
Description: Student may contact the instructor or department for information.

Math 5615H Honors: Introduction to Analysis I
4 credit(s);
Instructor: Baxter, John Robert
Description: Student may contact the instructor or department for information.

Math 5615H Honors: Introduction to Analysis I
4 credit(s);
Instructor: Aristoff, David G
Description: Student may contact the instructor or department for information.

Math 5651 Basic Theory of Probability and Statistics
4 credit(s);
Instructor: Bobkov, Sergey G
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 5652 Introduction to Stochastic Processes
4 credit(s);
Instructor: Yang, Tzu-Wei
Description: Student may contact the instructor or department for information.

Math 5652 Introduction to Stochastic Processes
4 credit(s);
Instructor: Kemajou, Isabelle
Description: Student may contact the instructor or department for information.

Math 5705 Enumerative Combinatorics
4 credit(s);
Instructor: Glick, Max
Description: Student may contact the instructor or department for information.

Math 5711 Linear Programming and Combinatorial Optimization
4 credit(s);
Instructor: Wang, Zizhuo
Description: Student may contact the instructor or department for information.

Math 8001 Preparation for College Teaching
Math 8201 General Algebra
A-F only, 3 credit(s);
Instructor: Reiner, Victor Schorr
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: Garrett, Paul
Description: Student may contact the instructor or department for information.

Math 8253 Algebraic Geometry
A-F only, 3 credit(s);
Instructor: Lan, Kai-Wen
Description: Student may contact the instructor or department for information.

Math 8271 Lie Groups and Lie Algebras
A-F only, 3 credit(s);
Instructor: Jiang, Dihua
Description: Student may contact the instructor or department for information.

Math 8300 Topics in Algebra
A-F only, 1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Messing, William
Description: Student may contact the instructor or department for information.

Math 8301 Manifolds and Topology
A-F only, 3 credit(s);
Instructor: Li PhD, Tian-Jun
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: Mori, Yoichiro
Description: Student may contact the instructor or department for information.

Math 8441: Numerical Analysis and Scientific Computing
3 credit(s);
Instructor: Luskin, Mitchell B
Description: Student may contact the instructor or department for information.

Math 8450: Topics in Numerical Analysis
A-F only, 1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Cockburn, Bernardo
Description: Student may contact the instructor or department for information.

Math 8583: Theory of Partial Differential Equations
A-F only, 3 credit(s);
Instructor: Safonov, Mikhail V
Description: Student may contact the instructor or department for information.

Math 8601: Real Analysis
A-F only, 3 credit(s);
Instructor: Keel, Markus
Description: Student may contact the instructor or department for information.

Math 8651: Theory of Probability Including Measure Theory
3 credit(s);
Instructor: Gray, Lawrence F
Description: Student may contact the instructor or department for information.

Math 8659: Stochastic Processes
3 credit(s);
Instructor: Krylov, Nicolai Vladimi
Description: Student may contact the instructor or department for information.

Math 8668: Combinatorial Theory
A-F only, 3 credit(s);
Instructor: Stanton, Dennis W
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 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: Polacik,Peter  
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study  
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  
1-6 credit(s), max credits 24, 4 completions allowed;  
Instructor: Calderer,Carme  
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study  
1-6 credit(s), max credits 24, 4 completions allowed;  
Instructor: Spirn,Daniel  
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study  
1-6 credit(s), max credits 24, 4 completions allowed;  
Instructor: Lerman,Gilad  
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study  
1-6 credit(s), max credits 24, 4 completions allowed;  
Instructor: Lawson,Tyler  
Description: Student may contact the instructor or department for information.

Math 8991 Independent Study  
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: Lyubeznik,Gennady  
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: Garrett,Paul  
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: Jiang,Dihua  
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: Polacik, Peter
  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: Akhmedov, Anar
  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: Bou-Rabee, Khalid
  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 3101 Mathematics and Pedagogy for Elementary Teachers II
  A-F only, 3 credit(s);
  Instructor: Pettis, Christy R
  Description: Student may contact the instructor or department for information.

MthE 3102 Mathematics and Pedagogy for Elementary Teachers II
  A-F only, 3 credit(s);
  Instructor: Wyberg, Terrence 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: Luke, Michele M
  Description: Student may contact the instructor or department for information.

MthE 5355 Mathematics for Diverse Learners
  3 credit(s);
  Instructor: Post, Thomas R
  Description: Mathematical concepts and methods for exceptional students, both low achieving and gifted. Experimental materials and methods designed for underachieving students.

MthE 5993 Directed Studies in Mathematics Education
  S-N only, 2 credit(s);
  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 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: Kowalewski,Timothy Mariusz
Description: Student may contact the instructor or department for information.

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 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: Chase,Thomas Richard
Description: Student may contact the instructor or department for information.

ME 3222 Design and Manufacturing II
A-F only, 4 credit(s);
Instructor: Chase,Thomas Richard
Description: Student may contact the instructor or department for information.

ME 3281 System Dynamics and Control
A-F only, 4 credit(s);
Instructor: Dumitrica,Traian
Description: Student may contact the instructor or department for information.

ME 3324 Introduction to Thermal Science
A-F only, 3 credit(s);
Instructor: Sparrow,Ephraim M
Description: Fundamentals fo thermodynamics and heat transfer. Thermal properties of substances. First and second

**Style:** 100% Lecture.

**Grading:** 35% mid exam, 25% final exam, 20% problem solving, 20% other evaluation. attendance

**Exam Format:** quantitative problem solving

**ME 3331 Thermal Sciences I**  
A-F only, 3 credit(s);  
**Instructor:** Garrick, Sean Clifford  
**Description:** Student may contact the instructor or department for information.

**ME 3332 Thermal Sciences II**  
A-F only, 3 credit(s);  
**Instructor:** Hong, Jiarong  
**Description:** Student may contact the instructor or department for information.

**ME 3333 Thermal Sciences III**  
A-F only, 3 credit(s);  
**Instructor:** Hubel, Allison  
**Description:** Student may contact the instructor or department for information.

**ME 3333 Thermal Sciences III**  
A-F only, 3 credit(s);  
**Instructor:** Hubel, Allison  
**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:** Bohlmann, Brad  
**Description:** Student may contact the instructor or department for information.

**ME 4080 Topics in Mechanical Engineering**  
4 credit(s), max credits 8;  
**Instructor:** Bischof, John C  
**Description:** Student may contact the instructor or department for information.

**ME 4081H Mechanical Engineering Honors Thesis I**  
A-F only, 2 credit(s);  
**Instructor:** Davidson, Jane H  
**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
ME 4090 Advanced Engineering Problems  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Kelso, Frank M  
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: Sun, Zongxuan  
Description: Student may contact the instructor or department for information.

ME 4231 Motion Control Laboratory  
A-F only, 4 credit(s);  
Instructor: Sun, Zongxuan  
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.  
Style: 33% Lecture, 66% Laboratory.  
Exam Format: There will be one oral final exam.

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.

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 5228 Introduction to Finite Element Modeling, Analysis, and Design
ME 5243 Advanced Mechanism 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 5344 Thermodynamics of Fluid Flow With Applications  
A-F only, 4 credit(s);  
Instructor: Shen, Lian  
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 5666 Modern Thermodynamics  
A-F only, 4 credit(s);  
Instructor: Aksan, Alptekin  
Description: ME 5666 Modern Thermodynamics: Bio-NanoThermodynamics This course focuses on applications of thermodynamic principles to biology and nanotechnology. It is designed as a two-instructor course to re-introduce the science of Thermodynamics and combine it with engineering modeling. The topics to be covered in the course include; Molecular Thermodynamics, Relations between Microscopic and Macroscopic Properties, Thermodynamic Constraints and Ensembles, Computational Tools at Thermodynamic Equilibrium, Chemical Thermodynamics, Irreversible and Nonequilibrium Thermodynamics, Thermodynamic Optimization, Thermodynamics in Nature, and Biothermodynamics. The students will be divided into groups of 4-5. Each group will be assigned a project, which requires application of the thermodynamic modeling skills taught in the course. The course will include 3 hour/week classroom instruction and 1 hour/week discussion.  
Style: 75% Lecture, 20% Small Group Activities, 5% Student Presentation.  
Grading: 50% mid exam, 50% reports/papers.

ME 8001 Research Ethics and Professional Practice  
No Grade, 0 credit(s);  
Instructor: Kulacki, Francis A  
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 8285 Vehicle Dynamics and Control  
A-F only, 3 credit(s);  
Instructor: Rajamani, Rajesh  
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 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 8446 Advanced Combustion
A-F only, 3 credit(s);
Instructor: Northrop, William
Description: Student may contact the instructor or department for information.

ME 8462 Turbomachinery
A-F only, 3 credit(s);
Instructor: Simon, Terrence W
Description: Student may contact the instructor or department for information.

ME 8773 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Shen, Lian
Description: Student may contact the instructor or department for information.

ME 8774 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Shen, Lian
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 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.

Medical Physics  
B272 Mayo Memorial Building

MPhy 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.

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

MPhy 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.

MPhy 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.

MPhy 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.

MPhy 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.
Medicinal Chemistry  8-101 Weaver-Densford Hall

MedC 5245 Introduction to Drug Design
A-F only, 3 credit(s);ChemCredit will not be granted if credit has been received for: PHAR 6245;
Instructor: Amin,Elizabeth Ambrose
Description: Student may contact the instructor or department for information.

MedC 8001 General Principles of Medicinal Chemistry
A-F only, 3 credit(s);
Instructor: Ferguson,David M
Description: Student may contact the instructor or department for information.

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: Haskell-Luevano,Carrie
Description: Student may contact the instructor or department for information.

MedC 8500 Design of Chemotherapeutic Agents
A-F only, 2 credit(s);
Instructor: Xing,Chengguo
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: Ferguson,David M
Description: Student may contact the instructor or department for information.

Medieval Studies  1030 Heller Hall

MeSt 3610 Topics in Medieval Studies: Vikings, Knights & Reformers: Ger & Eur Cultr 1700
3 credit(s), max credits 24, 8 completions allowed;
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. 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.
MeSt 3610 Topics in Medieval Studies: Jews of Islamic Medit/Christian Europe, 7th-17th C
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 3610 Topics in Medieval Studies: Introduction to Medieval History
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Flynn, Christopher Patrick
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: Medieval Art
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Bartoli, Roberta
Description: 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, precisely 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.

MeSt 3610 Topics in Medieval Studies: The Viking World: Story, History, and Archaeology
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Mason, Austin Prosser Johnson
Description: Student may contact the instructor or department for information.

MeSt 4610 Intermediate Topics in Medieval Studies: Old English I
3 credit(s), max credits 32, 8 completions allowed;
Instructor: Scheil, Andrew
Description: Old English I. This course is an introduction to the rich language and literature of Anglo-Saxon England (circa. 500-1100). "Old English," or as it is sometimes known, "Anglo-Saxon," is the earliest form of the English language; therefore, the primary course goal will be to acquire the ability to read Old English texts in the original. No previous experience with Old English or any other language is necessary or expected; undergraduates and graduate students are welcome. This course fulfills the literary theory/linguistic requirement. for the undergraduate English major. A knowledge of Old English will allow you to touch the most ancient literary sensibilities in the English tradition; these sensibilities are familiar and strange at the same time, as we sense our deep cultural connection to these texts across the centuries, yet at the same time feel that the past is a strange place indeed. The power of Old English literature has profoundly influenced authors such as Tennyson, Pound, Graves, Wilbur, Hopkins, Gunn, Auden, Seamus Heaney, C.S. Lewis, and of course, J.R.R. Tolkien. The first half of the course will be spent on the basics of Old English morphology and syntax, with brief readings and exercises drawn from a variety of Anglo-Saxon sources-magic charms, the bible, riddles, monster tales, medical texts, homilies. In the second half of the course we will translate more extensive selections from religious and historical prose, as well as religious, elegiac, and heroic battle poetry.

MeSt 5610 Advanced Topics in Medieval Studies
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 Germ and tell its contents to the rest of the group.

MeSt 5610 Advanced Topics in Medieval Studies
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Liberman, Anatoly
Description: Old Norse is like any other language course, with the difference that students are not taught to write or speak the language. In Old Norse (mainly in Old Icelandic) some of the greatest stories and poems of the Middle Ages were recorded. At the end of the year, students will be able to read the sagas, even if slowly and with a dictionary. One semester will give sufficient exposure to those who want to read Old Icelandic on their own, but security will come only in spring. The book to be used is E. V. Gordon's An Introduction to Old Norse. Those who will stay for both semesters will learn a good deal about one of the main Old Germanic languages and about some of the most memorable literatures preserved in Germanic. There will be day to day reading assignments: first very short, in the second semester between two and three pages a week. In the Fall Semester, there will be a midterm and a final. The grade will depend on class participation (40%:
regular attendance is crucial), the results of the midterm (25%) and final (35%).

MeSt 8110 Seminar in Medieval Studies: Gender in Medieval/Early Modern Culture
- A-F only, 3 credit(s), max credits 48, 16 completions allowed;
- **Instructor:** Watkins, John
- **Description:** Student may contact the instructor or department for information.

### 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 2003], [CHEM 2301 or BIOC 2331]
- **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 1002 or BIOL 1009 or BIOL 2003], [CHEM 2301 or BIOC 2331]
- **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 textbooks.

**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]
- **Instructor:** Vezys, Vaiva
- **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 4994 Directed Research
S-N only, 1-7 credit(s), max credits 28, 4 completions allowed;
Instructor: Jenkins, Marc
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: Armstrong, Sandra K
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 8003 Immunity and Immunopathology
4 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 MICA graduate students for their qualifying examinations. As such, MICA 8012 is only open to MICA 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 MICA graduate students for their qualifying examinations. As such, MICA 8012 is only open to MICA 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 8371 Mucosal Immunobiology
A-F only, 3 credit(s); 8001 or instr consent Credit will not be granted if credit has been received for: CMB 8371;
Instructor: Costalonga, Massimo
Description: Student may contact the instructor or department for information.

MICA 8910 Seminar: Faculty Research Topics
No Grade, 0 credit(s);
Instructor: Kaplan, Daniel H
Description: Student may contact the instructor or department for information.

MICA 8920 Seminar: Student Research Topics
No Grade, 0 credit(s);
Instructor: Jameson, Steven Phillip
Description: Student may contact the instructor or department for information.

Military Science

Mil 103 MS I Zero Credit Lead Lab
A-F only, 0 credit(s);
Instructor: Heller, Greg
Description: Student may contact the instructor or department for information.

Mil 203 MS II Zero Credit Lead Lab
A-F only, 0 credit(s);
Instructor: Heller, Greg
Description: Student may contact the instructor or department for information.

Mil 303 MS III Zero Credit Lead Lab
A-F only, 0 credit(s);
Instructor: Dempsey, David Michael
Description: Student may contact the instructor or department for information.

Mil 403 MS IV Zero Credit Lead Lab
A-F only, 0 credit(s);
Instructor: Harris, Dustin Kimoana
Description: Student may contact the instructor or department for information.

Mil 1003 Military Science I Leadership Lab
A-F only, 1 credit(s);
Instructor: STAFF
Description: Learn basic skills. Gain insight into the advanced course in order to make an informed decision whether to apply for it. Build self confidence and team building leadership skills that can be applied throughout life.
Mil 1101 Leadership and Personal Development  
A-F only, 1 credit(s);  
Instructor: Heller, Greg  
Description: Student may contact the instructor or department for information.

Mil 1201 Innovative Team Leadership  
A-F only, 2 credit(s);  
Instructor: Ruedebusch, Mitchell Adam  
Description: Student may contact the instructor or department for information.

Mil 1203 MS II One Credit Lead Lab  
A-F only, 1 credit(s);  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.

Mil 3301 Adaptive Tactical Leadership  
A-F only, 3 credit(s);  
Instructor: Dempsey, David Michael  
Description: Student may contact the instructor or department for information.

Mil 3303 MS III One Credit Lead Lab  
A-F only, 1 credit(s);  
Instructor: Dempsey, David Michael  
Description: Student may contact the instructor or department for information.

Mil 3401 Developing Adaptive Leaders  
A-F only, 3 credit(s);  
Instructor: Harris, Dustin Kimoana  
Description: Student may contact the instructor or department for information.

Mil 3403 MS IV One Credit Lead Lab  
A-F only, 1 credit(s);  
Instructor: Harris, Dustin Kimoana  
Description: Student may contact the instructor or department for information.

Mil 3501 Marksmanship Training Programs  
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  
250 Biological Sciences

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: Titus, Margaret A.  
Description: Student may contact the instructor or department for information.

MCDG 8950 Teaching Practicum  
S-N only, 1 credit(s), max credits 2;
Instructor: O'Connor PhD, Michael B
Description: Student may contact the instructor or department for information.

Mortuary Science  A-275 Mayo (Box 740)

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, 3 credit(s);
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 3025 Business Law
A-F only, 3 credit(s);
Instructor: Meslow, Doug
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 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
A-F only, 1–4 credit(s), max credits 12, 3 completions allowed;
Instructor: Woosley, Angela
Description: Student may contact the instructor or department for information.

Moving Image Studies 235 Nicholson Hall

MlmS 8001 Theories of the Moving Image
3 credit(s);
Instructor: Ouellette, Laurie Jean
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: Redoute, Karolyn Mary
Description: This course is specifically designed for transfer or returning students who wish to complete a degree at the University of Minnesota after a two-year break in their education. The course will focus on the creation of a proposal of study for the Multidisciplinary Studies Degree, which includes a statement of purpose, a reflective essay on your education, and a rationale for courses chosen for the degree. Readings will come from an anthology and from e-reads. These are designed to help you contemplate your areas of study, while also providing you with models of personal writing. Readings are assessed by small papers and short quizzes. The major project is a 15-page proposal of study which requires constant revision. The course website may be from a prior semester and is subject to change.

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 an MdS Proposal for Plan of Study and formulate a plan of courses and projects through which to complete a degree. 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

MdS 3101 Project Development
A-F only, 1 credit(s), max credits 5, 5 completions allowed;
Instructor: Hanson PhD, JoAnn Marie
Description: This online course is for returning adult students who are admitted to the College of Continuing Education's Multidisciplinary Studies major. Development, completion, approval of MdS project proposal. Steps/skills of academic project design/development including academic research/writing. Library data base searching methods/citation styles.
Style: Online
Grading: See attached syllabus

MdS 3201 Project Registration 1
OPT No Aud, 3 credit(s);
Instructor: Hanson PhD, JoAnn Marie
Description: This online course is for returning adult students who are admitted to the College of Continuing Education's Multidisciplinary Studies major. Development, completion, approval of MdS project proposal. Steps/skills of academic project design/development including academic research/writing. Library data base searching methods/citation styles.
Style: Online
Grading: See attached syllabus

Museum Studies

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

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
Description: An examination of the beginnings of rock music from its precursors circa 1900 through the early '70s: emphasis on early Rock and Roll, Rhythm and Blues, Soul Music, the first British Invasion, and the rock counterculture centered in San Francisco beginning in the mid-60s. The focus is upon rock as music, although lyrics and social milieu are also considered. Course work is primarily comprised of readings, music listening in and out of class, frequent quizzes, and a comprehensive final exam.
Style: 30% Lecture, 30% Discussion, 30% Laboratory. quizzes and group work
Grading: 20% final exam, 50% reports/papers, 10% special projects, 20% quizzes.
Exam Format: multiple-choice and other short answers

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
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.
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
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. 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."

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: Currie,Gabriela
Description: Student may contact the instructor or department for information.

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 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 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.

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.

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.

Mus 1151 Piano: Class Lessons II
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.
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 music learning skills. 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: Colby, Zachary Alan
Description: In this hands-on vocal laboratory setting, students will develop the basic skills of singing: breath management, tone production, resonance, tone quality, vibrato, body awareness, and diction. Participants will practice and integrate these various elements of classical vocal technique in preparation for and performance of vocal solos from standard vocal literature. Students will discover means to greater self-awareness, confidence, and expression through performance, and enhance their appreciation for the art of singing. Using musical terminology, students will objectively describe and reflect on live classical vocal recitals, operas, and concerts. This course is intended for amateur singers of any background or experience level who wish to learn about the art of singing without amplification and improve themselves vocally and musically.

Mus 1260 Voice Class
2 credit(s), max credits 4;
Instructor: Olson, Jennifer Lynn
Description: Student may contact the instructor or department for information.

Mus 1260 Voice Class
2 credit(s), max credits 4;
Instructor: Kozisek, David Andrew
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: Stein, Cassius Clifford
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 1511 Ear-Training and Sight-Singing I
A-F only, 1 credit(s);
Instructor: Gopinath,Sumanth S
Description: Student may contact the instructor or department for information.

Mus 1511 Ear-Training and Sight-Singing I
A-F only, 1 credit(s);
Instructor: Bauder, Joshua C
Description: Student may contact the instructor or department for information.

Mus 1511 Ear-Training and Sight-Singing I
A-F only, 1 credit(s);
Instructor: Nelson, Anna Rose
Description: Student may contact the instructor or department for information.

Mus 1511 Ear-Training and Sight-Singing I
A-F only, 1 credit(s);
Instructor: Stevens, Cecilia Abigail
Description: Student may contact the instructor or department for information.

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 do people conceptualize music? 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.

Mus 1905 Topics: Freshman Seminar: Mapping Arts Play Culture in the Twin Cities
A-F only, 3 credit(s);
Instructor: Addo PhD, Akosua O
Description: MUS 1905: Mapping Arts Play Culture in the Twin Cities: A class designed to provide participants with opportunities to observe children from diverse ethnic and socioeconomic backgrounds play in child initiated and created play spaces. We will explore the kinds of arts play that exist in selected communities of the Twin Cities, and document how children make sense of their city in outside of school playgrounds
Style: 10% Lecture, 5% Discussion, 15% Small Group Activities, 40% Field Trips, 5% Guest Speakers, 5% Web Based, 20% Service Learning.

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 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: Currie, Gabriela
Description: Student may contact the instructor or department for information.

Mus 3045 The Avant-Garde
A-F only, 3 credit(s);
Instructor: Lubet, Alex
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: See attached syllabus

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: Mehaffey, Matthew Wayne
Description: Student may contact the instructor or department for information.

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 3200 Campus Singers
2 credit(s), max credits 16, 8 completions allowed;
Instructor: Shoultz, George Phillip
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: Student may contact the instructor or department for information.

Mus 3262 English Diction for Singers
A-F only, 1 credit(s);
Instructor: Del Santo, Jean Marie
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: Student may contact the instructor or department for information.
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: Hand,Caroline
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: 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: Kirchhoff,Craig J
Description: Student may contact the instructor or department for information.

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: MUS 3430 (Campus Orchestra) offers students of any major an opportunity to participate in an orchestral performance ensemble at the University. Through the process of musical preparation of repertoire for performance, students explore the cultural, historical, and musical backgrounds of the composers whose music is being performed. Though no competitive audition is required for enrollment, musicians new to MUS 3430 are asked to perform an informal playing demonstration for the conductors before the first rehearsal; these demonstrations give the conductors an awareness of individuals' musical backgrounds, as well as the overall performance potential of the orchestra. Sections 001 and 002 are open to students who play flute, oboe, clarinet, bassoon, horn, trumpet, trombone, tuba, percussion, violin, viola, cello and bass. Section 003 is open to students who play violin, viola, cello and bass. Fall 2013 Maroon Campus Orchestra (Section 001) Repertoire: SAINT-SAENS: Suite Algerienne and KALINNIKOV: Symphony No. 1. Fall 2013 Gold Campus Orchestra (Section 002) Repertoire: VERDI: Triumphal March, from Aida, VERDI: Prelude to Act I, from La Traviata, MARQUEZ: Danzon No. 2, ROSSINI: Barber of Seville Overture, and SAINT-SAENS: Bacchanale, from Samson and Delilah. Fall 2013 Campus String Orchestra (Section 003) Repertoire: SIBELIUS: Andante festivo, VIVALDI: Autumn, from The Four Seasons, MAHLER: Adagietto, from Symphony No. 5, and GRIEG: Holberg Suite, op.40. (Repertoire and performance dates/location are subject to change.)
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: Student may contact the instructor or department for information.

Mus 3490 Athletics Bands
A-F only, 1 credit(s), max credits 16, 16 completions allowed;
Instructor: Diem,Timothy W
Description: Student may contact the instructor or department for information.

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
2 credit(s);
Instructor: Dillon,James
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.
Grading: 20% mid exam, 20% final exam, 10% quizzes, 50% other evaluation.
Exam Format: dictation

Mus 3602W History of Western Music II
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Grayson,David Alan
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 4514 Ear-Training and Sight-Singing for 20th-Century Music**  
A-F only, 1 credit(s);  
**Instructor:** Crane, Steven Joseph  
**Description:** Student may contact the instructor or department for information.

**Mus 4514 Ear-Training and Sight-Singing for 20th-Century Music**  
A-F only, 1 credit(s);  
**Instructor:** Cook, Conor  
**Description:** Student may contact the instructor or department for information.

**Mus 5150 Body Awareness in Activity: The Alexander Technique for Musicians**  
2 credit(s), max credits 8, 4 completions allowed;  
**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.  
**Grading:** 33% reports/papers, 33% attendance, 33% class participation.

**Mus 5151 Organ Literature I**  
A-F only, 3 credit(s);  
**Instructor:** Billmeyer, Dean W  
**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:** Student may contact the instructor or department for information.

**Mus 5240 University Singers**  
A-F only, 1 credit(s), max credits 8, 8 completions allowed;  
**Instructor:** Romey, Kathy Saltzman  
**Description:** Student may contact the instructor or department for information.

**Mus 5241 Vocal Literature I**  
A-F only, 3 credit(s);  
**Instructor:** Lovelace, Timothy  
**Description:** Student may contact the instructor or department for information.

**Mus 5250 Opera Workshop and Ensemble**  
A-F only, 2 credit(s), max credits 16, 8 completions allowed;  
**Instructor:** Walsh, David Allan  
**Description:** Student may contact the instructor or department for information.
Mus 5271 Diction for Singers I
A-F only, 2 credit(s);
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

Mus 5340 Jazz Ensemble
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Sorenson, Dean Patrick
Description: Student may contact the instructor or department for information.

Mus 5410 University Wind Bands
A-F only, 1 credit(s), max credits 14, 14 completions allowed;
Instructor: Luckhardt, Jerry M
Description: Student may contact the instructor or department for information.

Mus 5410 University Wind Bands
A-F only, 1 credit(s), max credits 14, 14 completions allowed;
Instructor: Kirchhoff, Craig J
Description: Student may contact the instructor or department for information.

Mus 5420 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 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 5427 Violin Pedagogy I
A-F only, 2 credit(s);
Instructor: Kim, Young-Nam
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
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: Meza, Fernando A.
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: Clark Silva, Marilyn Kathleen
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 5591 Introduction to Music Information Technology
A-F only, 3 credit(s);
Instructor: Mazzola PhD, Guerino
Description: Student may contact the instructor or department for information.

Mus 5597 Music and Text
A-F only, 3 credit(s);
Instructor: Cherlin, Michael
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 5950 Topics in Music: Beethoven's Sonatas for Violin, Cello & Solo Piano
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: 19th-Century Music
3 credit(s), max credits 15, 15 completions allowed;
Instructor: Harness, Kelley A
Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music: Intensive Recitativo: Context & Practice
1-2 credit(s), max credits 15, 15 completions allowed;
Instructor: Zabala, Adriana
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: Radovanija, Maja
  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 8182 Opera History in Context: Monteverdi and Mozart
  A-F only, 3 credit(s);
  Instructor: Walsh, David Allan
  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
  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: Bribitzer-Stull, Matt
  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: Musical Minimalisms
  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 8640 Seminar in Musicology: Mendelssohn as Epigone
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 8644 Seminar: Advanced Research in Historical Musicology
A-F only, 3 credit(s);
Instructor: Currie, Gabriela
Description: Student may contact the instructor or department for information.

Music Applied 100 Ferguson Hall

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/Plano%20Ap%201101_3101.pdf
Style: individual lessons
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: 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: Olson, Jennifer Lynn
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: Kozisek, David Andrew
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: O'Reilly, Sally P
Description: Student may contact the instructor or department for information.

MusA 1108 Double Bass: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Brown, Christopher Craig
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 1117 Trombone: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Ashworth, Thomas Jackson
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: Krahn, Samuel W
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: Stein, Cassius Clifford
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: Hildebrand, Jacob Alexander
Description: Student may contact the instructor or department for information.

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: Del Santo, Jean Marie
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 1204 Voice: Music Education and BA
   A-F only, 2 credit(s), max credits 16, 8 completions allowed;
   Instructor: Zabala, Adriana
   Description: Student may contact the instructor or department for information.

MusA 1205 Violin: Music Education and BA
   A-F only, 2 credit(s), max credits 16, 8 completions allowed;
   Instructor: Bjork, Mark P
   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 1212 Clarinet: Music Education and BA
   A-F only, 2 credit(s), max credits 16, 8 completions allowed;
   Instructor: Fiterstein, Alexander
   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 1214 Bassoon: Music Education and BA
   A-F only, 2 credit(s), max credits 16, 8 completions allowed;
   Instructor: Miller Jr, John W
   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 1219 Tuba: Music Education and BA
   A-F only, 2 credit(s), max credits 16, 8 completions allowed;
   Instructor: Campbell, Steven C
   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: Hey, Philip C
   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 1222 Harp: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Kienzle,Kathy
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: Artymiw, Lydia
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: 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: De Haan, John
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 1304 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 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 1309 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 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: Wyatt,Angela J.
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: Miller Jr,John W
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: Lemen,Caroline May
Description: Student may contact the instructor or department for information.

MusA 1316 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 1317 Trombone: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Ashworth, Thomas Jackson
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 1322 Harp: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Kienzle, Kathy
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: Radovanija, 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 1402 Harpsichord: 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 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: Colby, Zachary Alan
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: Olson,Jennifer Lynn
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: Kozisek,David Andrew
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 1423 Guitar: Music Major Secondary (undergraduate)
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Stein, Cassius Clifford
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: Hildebrand, Jacob Alexander
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: Del Santo, Jean Marie
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: Zaro-Mullins, Wendy
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 1905 Violin: Music Major Transfer  
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: O'Reilly,Sally P  
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: Bjork,Mark P  
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: Remenikova,Tanya  
Description: Student may contact the instructor or department for information.

MusA 1911 Oboe: 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 1912 Clarinet: Music Major Transfer  
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Fiterstein,Alexander  
Description: Student may contact the instructor or department for information.

MusA 1916 Trumpet: Music Major Transfer  
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Baldwin,David B  
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 1921 Percussion: Music Major Transfer  
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Meza,Fernando A.  
Description: Student may contact the instructor or department for information.

MusA 1922 Harp: Music Major Transfer  
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Kienzle,Kathy  
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: Radovanilja,Maja  
Description: Student may contact the instructor or department for information.

MusA 2201 Piano: Music Ed and BA
MusA 2204 Voice: 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 2204 Voice: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 2204 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 2204 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 2204 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 2204 Voice: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

MusA 2206 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 2208 Bass: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Brown, Christopher Craig
Description: Student may contact the instructor or department for information.

MusA 2209 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 2211 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 2213 Saxophone: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Wyatt, Angela J.
Description: Student may contact the instructor or department for information.

MusA 2213 Saxophone: Music Education 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 2215 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 2216 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 2217 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 2221 Percussion: Music Education 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 2223 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 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 2301 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 2303 Organ: Music Major
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 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: 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: Kim, Young-Nam
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 2306 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 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 2311 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 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: 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: Ullery, Charles G
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 2317 Trombone: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Ashworth, Thomas Jackson
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 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
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 3204 Voice: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 3204 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 3204 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 3207 Cello: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Remenikova, Tanya
Description: Student may contact the instructor or department for information.

MusA 3209 Flute: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Bogorad, Julia A
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: Artymiw, Lydia
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
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;
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 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 3306 Viola: 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 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: Bogorad, Julia A
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 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 3319 Tuba: Music Major**  
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;  
**Instructor:** Campbell, Steven C  
**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:** Hey, Philip C  
**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
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Kienzle,Kathy
Description: Student may contact the instructor or department for information.

MusA 3323 Guitar: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Radovanija,Maja
Description: Student may contact the instructor or department for information.

MusA 5101 Piano: Elective (graduate non-major in music)
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Quenneville-Belair,Gabriel
Description: Student may contact the instructor or department for information.

MusA 5103 Organ: Elective (graduate non-major in music)
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Billmeyer,Dean W
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 5409 Flute: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Davis, Immanuel
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 5414 Bassoon: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Ullery, Charles G
Description: Student may contact the instructor or department for information.
MusA 5415 French Horn: Music Major Secondary (graduate)
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 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: Radovanija, 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 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: Thatcher, Sabina  
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 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: Nielubowski, Norbert John
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
Description: Student may contact the instructor or department for information.

MusA 8315 French Horn: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Lemen, Caroline May
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: Radovanlija, 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: Laboy, Ryan Joseph
Description: Student may contact the instructor or department for information.

MuEd 3101 Improvisation and Creativity in the Music Classroom
A-F only, 2 credit(s);
Instructor: Sorenson, Dean Patrick
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 3416 Choral Conducting and Methods II
A-F only, 3 credit(s);
Instructor: Hamann, Keitha Lucas
Description: Student may contact the instructor or department for information.

MuEd 3417 Style, Pedagogy, and Diction in the Choral Music Classroom I
A-F only, 2 credit(s);
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

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 3517 Instrumental Methods and Conducting II
A-F only, 3 credit(s);
Instructor: Sindberg PhD, Laura K
Description: This course will serve to examine instrumental methods, conducting, and rehearsal at the high school level. Topics included are: philosophy of music teaching and learning; organization and administration of the instrumental music program; planning and curriculum; assessment, measurement, and evaluation of teaching and learning; rehearsal techniques. This course includes a lab component, in which we will meet at an area school one class period each week.

MuEd 3519 Advanced Conducting and Repertoire (Instrumental)
MuEd 3802 Guitar I for Music Education and Music Therapy Majors: Developing Group Songleading Skills
A-F only, 2 credit(s);
Instructor: Luckhardt, Jerry M
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: Haack, Brenton William
Description: Student may contact the instructor or department for information.

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
A-F only, 2 credit(s);
Instructor: Hamann, Keitha Lucas
Description: Student may contact the instructor or department for information.

MuEd 5669 Psychology of Music
A-F only, 3 credit(s);
Instructor: Lipscomb, Scott D.
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 8115 Assessment in Arts Education
A-F only, 3 credit(s);
Instructor: Sindberg PhD, Laura K
Description: Student may contact the instructor or department for information.
MuEd 8280 Seminar: Current Trends in Music Education
A-F only, 3 credit(s), max credits 30, 10 completions allowed;
Instructor: Hamann, Keitha Lucas
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: Student may contact the instructor or department for information.

Nanoparticle Science and 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

Nav 1000 Professional Training in Naval Science
S-N only, 1 credit(s);
Instructor: Washa, Quincy M
Description: Naval Science Laboratory (NAV-1000 to be repeated both semesters freshman year; NAV-2000 to be repeated both semesters sophomore year. NAV-3000 to be repeated both semesters junior year; NAV-4000 to be repeated both semesters senior year and during fifth-year, if one is authorized.). The school will recommend one semester-hour credit. NSTC OD developed the course to cover PCC objectives not included in formal Naval Science courses. Topics cover general Navy/Marine Corps mission and policies, force protection, operational security, watch standing, physical fitness, nutrition, stress management, and other professional development subjects.

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: Naval Science Laboratory (NAV-1000 to be repeated both semesters freshman year; NAV-2000 to be repeated both semesters sophomore year. NAV-3000 to be repeated both semesters junior year; NAV-4000 to be repeated both semesters senior year and during fifth-year, if one is authorized.). The school will recommend one semester-hour credit. NSTC OD developed the course to cover PCC objectives not included in formal Naval Science courses. Topics cover general Navy/Marine Corps mission and policies, force protection, operational security, watch standing, physical fitness, nutrition, stress management, and other professional development subjects.

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: Naval Science Laboratory (NAV-1000 to be repeated both semesters freshman year; NAV-2000 to be repeated both semesters sophomore year. NAV-3000 to be repeated both semesters junior year; NAV-4000 to be repeated both semesters senior year and during fifth-year, if one is authorized.). The school will recommend one semester-hour credit. NSTC OD developed the course to cover PCC objectives not included in formal Naval Science courses. Topics cover general Navy/Marine Corps mission and policies, force protection, operational security, watch standing, physical fitness, nutrition, stress management, and other professional development subjects.

Nav 3302 Navigation II: Seamanship and Ship Operations
Nav 3310 Evolution of Warfare
A-F only, 3 credit(s);
Instructor: Washa, Quincy M
Description: The purpose of the Evolution of Warfare course is to provide the student with a basic understanding of the art, science, and concepts of warfare. The flow of the course starts with USMC warfare theory foundations (MCDP 1 Warfighting) to ensure students are introduced to concepts that are integral to being a USMC officer. Next, the guide uses topical periods with notable progressions in warfare. These periods illuminate the effects of both innovative and stale leadership and the resulting major transformations in warfare. Varying teaching points can be related to doctrine (tactics, techniques, and procedures - TTPs), organization, training, material (equipment), leadership, and personnel; this is a succinct version of modern day USMC. The curriculum can be applied in many ways but the focus is to view warfare not through the lens of a historian but as a military professional. Furthermore, the curriculum laces modern day shifts in warfare with sections for irregular and cyber warfare. Our historical analysis ends by relating the teachings to today's USMC doctrine.

Nav 4000 Professional Training in Naval Science
S-N only, 1 credit(s);
Instructor: Washa, Quincy M
Description: Naval Science Laboratory (NAV-1000 to be repeated both semesters freshman year; NAV-2000 to be repeated both semesters sophomore year; NAV-3000 to be repeated both semesters junior year; NAV-4000 to be repeated both semesters senior year and during fifth-year, if one is authorized.). The school will recommend one semester-hour credit. NSTC OD developed the course to cover PCC objectives not included in formal Naval Science courses. Topics cover general Navy/Marine Corps mission and policies, force protection, operational security, watch standing, physical fitness, nutrition, stress management, and other professional development subjects.

Nav 4401W Leadership and Management I
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ratte, David Scott
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 5040 Brain Networks: From Connectivity to Dynamics
A-F only, 4 credit(s);
Instructor: Amirikian, Bagrat
Description: Student may contact the instructor or department for information.

NSc 5203 Basic and Clinical Vision Science
3 credit(s);
Instructor: McLoon PhD, Linda K
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 8026 Neuro-Immune Interactions**
- 3 credit(s); 5561, MicB 4131 Credit will not be granted if credit has been received for: PSY 8026;
- Instructor: Molitor, Thomas William
- 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.

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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 1001 Fundamental Neuroscience: Understanding Ourselves**
- A-F only, 3 credit(s); Meets CLE req of Technology and Society
- Instructor: Hedges, Valerie Lynn
- 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 (can be taken concurrently), 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
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 stereotaxic 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 stereotaxic 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

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**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 1003 Intermediate Norwegian

- **5 credit(s); Credit will not be granted if credit has been received for: NOR 4003;**
- **Instructor:** Ianeva-Lockney,Arsena

**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 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, 35% quizzes, 7% additional semester exams, 27% attendance, 6% in-class presentation.

Nor 4001 Beginning Norwegian

- **2 credit(s); 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, Arlena  
**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?grammar 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.

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**Nursing**  
5-140 Weaver-Densford Hall

**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**  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
**Instructor:** Gaugler PhD, Joseph E  
**Description:** Student may contact the instructor or department for information.

**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, 5% 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:** Adwan, Jehad Zaki  
**Description:** Student may contact the instructor or department for information.

**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:** See attached syllabus  
**Exam Format:** Supervised, in-person exams.

**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:** See attached syllabus  
**Exam Format:** Supervised, in-person (not online) exam.

**Nurs 3703 Assessment and Beginning Interventions: Nursing Lab 1**  
A-F only, 2 credit(s);  
**Instructor:** Martin, Lisa  
**Description:** Student may contact the instructor or department for information.

**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.

**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.

**Nurs 3801 Patient Centered Care of Adults and Older Adults I**  
A-F only, 3 credit(s);  
**Instructor:** Dunlap, Karen J  
**Description:** Student may contact the instructor or department for information.

**Nurs 3801 Patient Centered Care of Adults and Older Adults I**  
A-F only, 3 credit(s);  
**Instructor:** Stellon, Kris Elaine  
**Description:** Student may contact the instructor or department for information.

**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.

**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:** Kunkel, Dorcas Elisabeth  
**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:** Kristoffersson, 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.
A-F only, 2 credit(s);
Instructor: Hoffman,Sarah James
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: Stellon,Kris Elaine
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: Ward,Julie Pitcher Rob
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: Peterson,Barbara Lois
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 4303 Practicum: Person Centered Care of Adults in Acute Care
A-F only, 3 credit(s);
Instructor: Kelley,Sabrina Megan
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: Kristofersson,Gisli Kort
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: Kerr,Madeleine June
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: Kunkel, Dorcas Elisabeth
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
Description: Student may contact the instructor or department for information.

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: Zins, Savannah M
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: Kristofersson, Gisli Kort
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: Looman PhD, Wendy Sue
Description: Student may contact the instructor or department for information.

Nurs 4430 Immunization Tour
S-N only, 1 credit(s); [Senior Bachelor of Science nursing student or professional master’s nursing student], completion of CPR Credit will not be granted if credit has been received for: PHAR 6210;
Instructor: Uden, Donald Lawrence
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Foley, Bradley James
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 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, 4 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, 4 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, 4 credit(s);
Instructor: Veglia-Young, Carolyn Marie
Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Dunlap,Karen J
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Rhudy,Lori M
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Kraft,Linda
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Loftness,Maren Elizabeth
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Post RN,Denise Ann
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Linck,Raney
Description: Student may contact the instructor or department for information.

Nurs 4703 Specialty Focused Practicum I
A-F only, 4 credit(s);
Instructor: Sunberg,Juliet E.
Description: Student may contact the instructor or department for information.

Nurs 4704 Continuum of Care Practicum
A-F only, 2 credit(s);
Instructor: Martin,Lisa
Description: Student may contact the instructor or department for information.

Nurs 4704 Continuum of Care Practicum
A-F only, 2 credit(s);
Instructor: Weber,Eileen P
Description: Student may contact the instructor or department for information.

Nurs 4704 Continuum of Care Practicum
A-F only, 2 credit(s);
Instructor: Goering,Mary Rebecca DeGrote
Description: Student may contact the instructor or department for information.

Nurs 4704 Continuum of Care Practicum
A-F only, 2 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: Ihrig, Sarah Catherine
Description: Student may contact the instructor or department for information.

Nurs 4706 Transition to Practice
A-F only, 1 credit(s);
Instructor: Mueller, Christine 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: 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: Mueller, Christine 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: Krichbaum PhD, Kathleen Elaine
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: Saftner, Melissa
Description: Student may contact the instructor or department for information.

Nurs 4800 Nursing Topics
0-16 credit(s), max credits 48, 3 completions allowed;
Instructor: Dean EdD, Patrick Joseph
Description: Student may contact the instructor or department for information.

Nurs 4800 Nursing Topics: Patient Care of Complex Psychiatric Conditions
2 credit(s), max credits 48, 3 completions allowed;
Instructor: Darst, Elaine
Description: Student may contact the instructor or department for information.

Nurs 4801 Research Topics
2 credit(s), max credits 16, 1 completion allowed;
Instructor: Bliss PhD, Donna Zimmaro
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: Dean EdD, Patrick Joseph
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
Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Peterson, Sheila Ann
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Rowan, Mary M.
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Goering, Mary Rebecca DeGrote
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Brintnell, Dawn Michele
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Veglia-Young, Carolyn Marie
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 Nursing Care of Complex Clients and Diverse Populations
A-F only, 2 credit(s);
Instructor: Potter PhD, Teddie Michelle
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: Brintnell, Dawn Michele
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: Davidson, Lars E
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: Vipond, Sara Ann
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: Clancy, Thomas R
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
A-F only, 3 credit(s);
Instructor: Fjone, Andra Lynn
Description: Student may contact the instructor or department for information.

Nurs 5222 Advanced Physiology
A-F only, 3 credit(s);
Instructor: Sanchez, Otto Alexander
Description: Student may contact the instructor or department for information.

Nurs 5222 Advanced Physiology
A-F only, 3 credit(s);
Instructor: Bronas, Ulf Gunnar
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: Pechacek RN, Judith Marie
Description: Student may contact the instructor or department for information.

Nurs 5800 Nursing Topics
1 credit(s), max credits 8, 4 completions allowed;
Instructor: Pechacek RN, Judith Marie
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 6102 Family Health Theory  
2 credit(s);  
Instructor: Looman PhD,Wendy Sue  
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: 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: Drake,Diana M.  
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: Ringdahl,Deborah Rene  
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: Juve,Catherine  
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: Saftner,Melissa  
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: Dierich, Mary Therese  
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: Pechacek RN, Judith Marie  
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: Peterson, Barbara Lois  
Description: Student may contact the instructor or department for information.

Nurs 6605 Psychiatric/Mental Health Advanced Nursing Practice Practicum I  
S-N only, 1 credit(s);  
Instructor: Peterson, Barbara Lois  
Description: Student may contact the instructor or department for information.

Nurs 6702 Executive Leadership Seminar I  
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, 2 credit(s);  
Instructor: Disch, Joanne M  
Description: Student may contact the instructor or department for information.

Nurs 6895 Adult Acute Care Holistic Health Assessment  
A-F only, 2 credit(s);  
Instructor: White, Kathryn W  
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 6934 Population-focused Assessment and Prioritization
A-F only, 3 credit(s);
Instructor: Robertson, Cheryl Lee
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: Lovinaria, Danilo Nestor Pajarillo
Description: Student may contact the instructor or department for information.

Nurs 7100 DNP Seminar I
A-F only, 2 credit(s);
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: Hooke, Mary Catherine M
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: Schadewald, Diane Marie
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 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Dean EdD, Patrick Joseph
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Dierich, Mary Therese
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Westra, Bonnie L.
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Lindeke PhD, Linda L
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Findorff, Mary Jocelyn
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Krichbaum PhD, Kathleen Elaine
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Duckett, Laura J
Description: Student may contact the instructor or department for information.
Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Chesney PhD, Mary L
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Ringdahl, Deborah Rene
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Hooke, Mary Catherine M
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: O’Conner-Von PhD, Susan K.
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Fulkerson, Jayne
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Peterson, Barbara Lois
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Robertson, Cheryl Lee
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Pfeiffer, Jeanne
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Kreitzer, Mary Jo
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Juve, Catherine
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Avery, Melissa D
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Bearinger, Linda Holm
Description: Student may contact the instructor or department for information.
Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Cheung, Corjena K
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Friedrich, Cheri L
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Steffes, Mary Teresa
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Treat-Jacobson PhD, Diane Jeanette
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Talley, Kristine Marie
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Hadidi, Niloufar Niakosari
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Drake, Diana M.
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Gaugler PhD, Joseph E
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Garcia PhD, Carolyn Marie
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Fagerlund, Kathleen 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: Sieving, Renee Evangeline
Description: Student may contact the instructor or department for information.
Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Pechacek RN, Judith Marie
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Bliss PhD, Donna Zimmaro
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Kubik, Martha Young
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Potter PhD, Teddie Michelle
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Kaas, Merrie Jean
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: McMorris, Barbara Jolene
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Adwan, Jehad Zaki
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Peden-McAlpine, Cynthia Jeanne
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Wyman, Jean Frances
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Mueller, Christine Ann
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Disch, Joanne M
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Poe, Christine R
Description: Student may contact the instructor or department for information.
Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Kerr, Madeleine June
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Bronas, Ulf Gunnar
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 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: White, Kathryn W
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Loman PhD, Wendy Sue
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Kristofersson, Gisli Kort
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Rhudy, Lori M
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Yu, Fang
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Clancy, Thomas R
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Lovinaria, Danilo Nestor Pajarillo
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Vanderhoef, Dawn
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Pesut, Daniel Joseph
Description: Student may contact the instructor or department for information.
Nurs 7110 DNP Project Direction I: Planning  
S-N only, 1 credit(s);  
Instructor: McMahon, Siobhan Kathleen  
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning  
S-N only, 1 credit(s);  
Instructor: Saftner, Melissa  
Description: Student may contact the instructor or department for information.

Nurs 7110 DNP Project Direction I: Planning  
S-N only, 1 credit(s);  
Instructor: McMurray, Roxanne R  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Halcon PhD, Linda Luciente  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Schadewald, Diane Marie  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Lindquist, Ruth Ann  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Dean EdD, Patrick Joseph  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Dierich, Mary Therese  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Westra, Bonnie L.  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Lindeke PhD, Linda L  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
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Instructor: Findorff, Mary Jocelyn  
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Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Krichbaum PhD,Kathleen Elaine
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
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Nurs 7111 DNP Project Direction II: Implementation
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Instructor: Chesney PhD,Mary L
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Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Ringdahl,Deborah Rene
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
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Nurs 7111 DNP Project Direction II: Implementation
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Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Peterson,Barbara Lois
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Robertson,Cheeryl Lee
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Pfeiffer,Jeane
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Kreitzer,MaryJo
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Juve,Catherine
Description: Student may contact the instructor or department for information.
Nurs 7111 DNP Project Direction II: Implementation
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Nurs 7111 DNP Project Direction II: Implementation
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Instructor: Gaugler PhD, Joseph E
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Garcia PhD, Carolyn Marie
Description: Student may contact the instructor or department for information.
Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Fagerlund, Kathleen A  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Sieving, Renee Evangeline  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Pechacek RN, Judith Marie  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Bliss PhD, Donna Zimmaro  
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Nurs 7111 DNP Project Direction II: Implementation  
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Instructor: McMorris, Barbara Jolene  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Adwan, Jehad Zaki  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Peden-McAlpine, Cynthia Jeanne  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Wyman, Jean Frances  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
S-N only, 1 credit(s);  
Instructor: Mueller, Christine Ann  
Description: Student may contact the instructor or department for information.
Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Disch, Joanne M
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Poe, Christine R
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Kerr, Madeleine June
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Bronas, Ulf Gunnar
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Monsen PhD, Karen A
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: White, Kathryn W
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Looman PhD, Wendy Sue
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Kristofersson, Gisli Kort
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Rhudy, Lori M
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Yu, Fang
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Clancy, Thomas R
Description: Student may contact the instructor or department for information.
Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Vanderhoeft, Dawn
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Pesut, Daniel Joseph
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: McMahon, Siobhan Kathleen
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: Saftner, Melissa
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation
S-N only, 1 credit(s);
Instructor: McMurray, Roxanne R
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Halcon PhD, Linda Luciente
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Schadewald, Diane Marie
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Lindquist, Ruth Ann
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Nurs 7112 DNP Project Direction III: Evaluation
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Nurs 7112 DNP Project Direction III: Evaluation
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Instructor: Wolfson, Dean Harris
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Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
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Instructor: Yu, Fang
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Nurs 7112 DNP Project Direction III: Evaluation  
S-N only, 1 credit(s);  
Instructor: Clancy, Thomas R  
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation  
S-N only, 1 credit(s);  
Instructor: Lovinaria, Danilo Nestor Pajarillo  
Description: Student may contact the instructor or department for information.

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S-N only, 1 credit(s);  
Instructor: Vanderhoef, Dawn  
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Nurs 7112 DNP Project Direction III: Evaluation  
S-N only, 1 credit(s);  
Instructor: McMurray, Roxanne R  
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: Benbenek, Mary Mescher
  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: Pfeiffer, Jeanne
  Description: Student may contact the instructor or department for information.

Nurs 7904 Nursing Education Practicum
  S-N only, 2 credit(s);
  Instructor: Krichbaum PhD, Kathleen Elaine
  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 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: Lindquist, Ruth Ann  
Description: Student may contact the instructor or department for information.

**Nurs 8177 Advanced Nursing Research Practicum**  
S-N only, 2 credit(s);  
Instructor: Krichbaum PhD, Kathleen Elaine  
Description: Student may contact the instructor or department for information.

**Nurs 8177 Advanced Nursing Research Practicum**  
S-N only, 2 credit(s);  
Instructor: Benbenek, Mary Mescher  
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**  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Ringdahl, Deborah Rene  
Description: Student may contact the instructor or department for information.

**Nurs 8361 Special Topics in Nursing**  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Monsen PhD, Karen A  
Description: Student may contact the instructor or department for information.

**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

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: Student may contact the instructor or department for information.

Nutr 8695 Independent Study: Nutrition
  1-10 credit(s), max credits 30, 3 completions allowed;
  Instructor: Cannon,Sara Jane
  Description: Student may contact the instructor or department for information.

Occupational Therapy  271 Children’s Rehabilitation Center(Box 388 UMHC)

OT 1003 Introduction to Occupational Therapy
  1 credit(s);
  Instructor: Jacobs,Cindy
  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: See attached syllabus
  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 Thielien
Description:

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: Shore, Leann M
Description: Student may contact the instructor or department for information.

OT 7201 Scholarly Inquiry in Health Sciences
A-F 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: 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.

OCS 3550 National Student Exchange: Off-Campus Study
S-N only, 0 credit(s);
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.

Office of Undergraduate Education
220 Morrill Hall

OUE 1086 The First Year Experience
A-F only, 2 credit(s);
Instructor: Young MA, Julie L
Description: Student may contact the instructor or department for information.

OUE 2100 Academic Planning and Exploration
1 credit(s);
Instructor: LeBlanc, Susan Lynn
Description: Student may contact the instructor or department for information.

OUE 2100 Academic Planning and Exploration
1 credit(s);
Instructor: Takatsuka, Kai N
Description: Student may contact the instructor or department for information.

OUE 3050 Introduction to Peer Education
1 credit(s);
Instructor: Walters, Matthew
Description: Student may contact the instructor or department for information.

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); 1101, 1102 Credit will not be granted if credit has been received for: OJIB 4103;
Instructor: Fairbanks, Brendan George
Description: Student may contact the instructor or department for information.

Ojib 4101 Beginning Ojibwe I
3 credit(s); 1104 in another language or passing score on LPE or grad student 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); 1101, 3103 Credit will not be granted if credit has been received for: OJIB 3103;
Instructor: Fairbanks, Brendan George
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 8018 Topics in Oral Pathobiology
A-F only, 2 credit(s), max credits 4;
Instructor: Herzberg, Mark C
Description: Student may contact the instructor or department for information.

OBio 8021 Oral Microbiology
2 credit(s);
Instructor: Rudney, Joel David
Description: Student may contact the instructor or department for information.

OBio 8027 Structural and Biological Aspects of Dental Biomaterials
1 credit(s);
Instructor: Aparicio PhD, Conrado
Description: Student may contact the instructor or department for information.

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.

OBio 8371 Mucosal Immunobiology
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.

Organizational Leadership, Policy and Development  330 Wulling Hall

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Thayer, Ellen R
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:** Bandy, Jack Todd
- **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:** 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:** 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, Kathrine 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:** Bergner, Rebecca Beatrice
- **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:** Cottledge, Anitra D
- **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:** Taylor Jr, Leonard
- **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: Brito, Marisol
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: 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: Stafford, Jeff
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: Maeker, Paul Keith
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: Omari, Abdul Majid
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: Fitzgerald-Sisk, Meg
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: Campbell, Anne Crist
Description: Student may contact the instructor or department for information.

OLPD 1801 Introduction to Career and Technical Education Teaching
A-F only, 2 credit(s);
Instructor: Schill, Jayne Greeney
Description: Student may contact the instructor or department for information.

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
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: Fredrickson,Brian Steven  
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: Marcy,Ben  
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: Stafford,Jeff  
Description: Student may contact the instructor or department for information.

OLPD 3305 Learning About Leadership Through Film and Literature  
3 credit(s);  
Instructor: Seashore,Karen Rose  
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 settings 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 3305 Learning About Leadership Through Film and Literature  
3 credit(s);  
Instructor: Tkachenko,Oleksandr  
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 settings 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 3402Credit 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 3402Credit 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: Burgum, Benjamin
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: Marcy, Ben
Description: Student may contact the instructor or department for information.

OLPD 3318 Introduction to Project Management
3 credit(s);
Instructor: Plachecki, Frank John
Description: Student may contact the instructor or department for information.

OLPD 3318 Introduction to Project Management
3 credit(s);
Instructor: Fitzgerald-Sisk, Meg
Description: The focus of this course is project management for business and industry. Students will learn the basics of project management, project lifecycles, deliverables, and processes as they are commonly used in the workplace. By the end of the course, students will be able to: 1. distinguish between projects, programs, and phases, 2. distinguish between project management processes and project processes, 3. choose the appropriate elements and activities from the project management process to use for any given project, 4. design a project management plan, 5. analyze the risk of a proposed project and develop a risk management plan, 6. distinguish between change management, change control, quality assurance, and quality control, and design management plans for each, 7. predict the outcome of a project, given specific information about the process at the midpoint, 8. justify and plan for a go/no-go decision based on project status reports, and 9. evaluate a project at its close.
Style: 25% Lecture, 40% Discussion, 35% Small Group Activities.
Grading: 44% special projects, 30% in-class presentation, 26% class participation.

OLPD 3380 Developing Intercultural Competence
A-F only, 3 credit(s);
Instructor: Brunner PhD, C
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 3496 Profession and Practice of Business and Marketing Education
A-F only, 2 credit(s);
Instructor: Vanacora, Cheryl Ann
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 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 3640 Introduction to Organization Development
A-F only, 3 credit(s);
Instructor: Chaudhuri,Sanghamitra
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 3808 Foundations of Student and Trainee Assessment
A-F only, 2 credit(s);
Instructor: Wegener,Inger Ann
Description: Student may contact the instructor or department for information.

OLPD 3829 Foundations of Course Development for Business and Industry
A-F only, 2 credit(s);
Instructor: Wegener,Inger Ann
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: Novillo,Walter E.
Description: Student may contact the instructor or department for information.

OLPD 4426 Strategic Customer Relationship Management
A-F only, 3 credit(s);
Instructor: Woldeab PhD,Daniel
Description: Student may contact the instructor or department for information.

OLPD 4426 Strategic Customer Relationship Management
OLPD 4426 Strategic Customer Relationship Management
A-F only, 3 credit(s);
Instructor: Mueller, Wayne G
Description: Student may contact the instructor or department for information.

OLPD 4496 Applied Experience in Business & Marketing Education
S-N only, 1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Vanacora, Cheryl Ann
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: Vanacora, Cheryl Ann
Description: Student may contact the instructor or department for information.

OLPD 4870 Introduction to Integrating Human Rights into Organizational Leadership
A-F only, 3 credit(s);
Instructor: Rudelius-Palmer, Kristi Lynn
Description: COURSE DESCRIPTION In the last few decades, some business organizations have increasingly embraced their responsibility to contribute to the promotion and protection of human rights, while others are still struggling with their moral and legal obligations. What are human rights and what do they mean for business professionals today? What policies and practices exist locally and internationally to integrate human rights into organizational leadership and management? How do we integrate human rights through human rights education, training, and organization culture? This course provides a foundation of knowledge about Human Rights and creates a forum to explore these issues. COURSE OBJECTIVES 1. Articulate and discuss major international human rights documents; 2. Identify and discuss elements of the Human Rights Management Framework; 3. Identify and research strategies, policies, practices, and norms related to integrating human rights into organizational leadership and management; 4. Understand the role and impact of businesses in the promotion and protection of human rights; 5. Analyze business-related human rights policies and strategies for promoting and protecting human rights in the workplace; 6. Apply Human Rights Education methods to facilitate discussions and training about human rights-friendly business practices; 7. Represent human rights and organizational leadership and management concepts creatively in a multi-media format.
Style: This is an online, web-based course, and all students are expected to have internet access and a basic understanding of computer use. Students are expected to check email at least once every 48 hours. More guidelines in class.
Grading: 22% reports/papers, 42% special projects, 36% class participation.

OLPD 5048 Cross-Cultural Perspectives on Leadership
3 credit(s);
Instructor: Quast, Louis Neumann
Description: Student may contact the instructor or department for information.

OLPD 5056 Case Studies for Policy Research
A-F only, 3 credit(s);
Instructor: Fry, Gerald Walton
Description: This course, taught by Gerald W. Fry, will introduce students to case study research in an international, intercultural context. Examples from both domestic and international contexts will be used. This research approach is highly flexible in the units of analysis that can be considered and the wide range of specific quantitative and qualitative research methods that can be applied in diverse interdisciplinary contexts. We will examine the different genres of case study research (e.g., historical, ethnographic, descriptive, exploratory, evaluative) and the research methods that are appropriate to those genres. We will examine how case study research has been used in the social and behavioral sciences, with the focus on the fields of education and policy issues. Students will read and critique case studies, and they will work individually or in teams to conduct and present to the class a small scale example of case study research. The goals of the course are to: 1. familiarize students with case study research genres, units of analysis, and methods. 2. promote students' skills in reading and critiquing case study research. 3. introduce students to the literature on case study research, and, 4. provide students the opportunity to practice conducting case study research. There is an emphasis on the creative mix of qualitative and quantitative research methods to enhance the rigor of case studies research. Another major element of the course is a critical examination of cases of unethical research. The course texts will be Robert Yin's recent book on case study research and an actual recent case study of a Mumbai slum, the national book award winning Behind
OLPD 5080 Special Topics: Organizational Leadership, Policy, & Development
1-3 credit(s), max credits 24, 24 completions allowed;
Instructor: Goldfine, Leonard S
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: Vavrus, Frances
Description: This course explores the history, methodologies, and major debates in the field of comparative education, a field united by the belief that one’s own educational system and practice can be improved by examining other ways of teaching and learning. It is also a field enlivened by differences of approach and scope, and by divergent views on what it means to compare two or more schools or societies. We will approach comparative education chronologically by looking changes in the dominant approaches to the field throughout the 20th century up to the present. We will also examine several enduring topics and analyze current debates, such as school improvement strategies, civic education, and the role of religion in schools. By engaging in critical discussions of case studies from different world regions, I hope you will develop an appreciation of the multiplicity of perspectives and practices surrounding education and of the ways that global and local forces shape schooling the world over.

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 5107 Gender, Education, and International Development
A-F only, 3 credit(s);
Instructor: Shirazi, Roozbeh
Description: Student may contact the instructor or department for information.

OLPD 5132 Intercultural Education and Training: Theory and Application
3 credit(s);
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: Keo, Phalla  
Description: Student may contact the instructor or department for information.

OLPD 5296 Field Experience in Adult Education  
S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;  
Instructor: Quast, Louis Neumann  
Description: Student may contact the instructor or department for information.

OLPD 5296 Field Experience in Adult Education  
S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;  
Instructor: Twohig, Catherine Carol  
Description: Student may contact the instructor or department for information.

OLPD 5321 The Principal as Leader of High-Performing Schools  
3 credit(s);  
Instructor: Massey, Steven Duane  
Description: Student may contact the instructor or department for information.

OLPD 5322 Leaders in the Superintendency and Central Office  
3 credit(s);  
Instructor: Brunner PhD, C  
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);
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
OPT No Aud, 3 credit(s); 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: Brunner PhD, C
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 5388 Leadership for Master(ful) Scheduling
2 credit(s);
Instructor: Dewey PhD, J. Richard
Description: We will examine the work of high-performing Professional Learning Communities and the implications for moving from building a master schedule to Leadership for the Master(ful) Scheduling: of time, space, motion and people. We will consider a variety of Master(ful) Scheduling strategies and engage in hands-on work with Infinite Campus software and scheduling-building logic, while focusing on the six pillars of Master(ful) Scheduling.

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: Dragseth, Kenneth Allen
Description: This course provides practical field experience for aspiring school administrators who are seeking Minnesota licensure as PK-12 Principal, District Superintendent, Director of Special Education, or Director of Community education. It features practical experience in the appropriate field under the guidance of a practicing school administrator and the University instructor. Each planned field experience (internship) is designed by the mentoring administrator, the university instructor, and the administrative intern based upon the State of Minnesota required competencies for each administrative license and the student's preassessment of competencies. Four required plus four elective administrative projects are required of each class member.
Grading: 75% special projects, 10% attendance, 15% class participation. S/N

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: This course provides practical field experience for aspiring school administrators who are seeking Minnesota licensure as PK-12 Principal, District Superintendent, Director of Special Education, or Director of Community education. It
features practical experience in the appropriate field under the guidance of a practicing school administrator and the University instructor. Each planned field experience (internship) is designed by the mentoring administrator, the university instructor, and the administrative intern based upon the State of Minnesota required competencies for each administrative license and the student’s preassessment of competencies. Four required plus four elective administrative projects are required of each class member.

**Grading:** 75% special projects, 10% attendance, 15% class participation. S/N

**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 5501Credit 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 5524Credit 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 5601 Foundations of Human Resource Development**  
1 credit(s);  
Instructor: Mathews, Melissa  
Description: Student may contact the instructor or department for information.

**OLPD 5607 Organization Development**  
A-F only, 3 credit(s);  
Instructor: Chaudhuri, Sanghamitra  
Description: Student may contact the instructor or department for information.

**OLPD 5611 Facilitation and Meeting Skills**  
1 credit(s);  
Instructor: Mathews, Melissa  
Description: Student may contact the instructor or department for information.

**OLPD 5612 International Human Resource Development**  
3 credit(s);  
Instructor: Ardichvili, Alexandre A  
Description: Student may contact the instructor or department for information.

**OLPD 5619 Planning and Decision-Making Skills**  
1 credit(s);  
Instructor: Mathews, Melissa
OLPD 5696 Internship: Human Resource Development
S-N only, 1-10 credit(s), max credits 10, 1 completion allowed;
Instructor: Twohig,Catherine Carol
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: Christesen,David Allen
Description: Student may contact the instructor or department for information.

OLPD 5701 U.S. Higher Education
3 credit(s);
Instructor: Gupton,Jarrett Temple
Description: Student may contact the instructor or department for information.

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 5808 Student and Trainee Assessment
A-F only, 2 credit(s); credit will not be granted if credit received for: BIE 5601 or WHRE 5601 Credit will not be granted if credit has been received for: HRD 5601;
Instructor: Wegener,Inger Ann
Description: Student may contact the instructor or department for information.

OLPD 5811 Education for Work
3 credit(s);
Instructor: Shumer,Robert D
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 PhD,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 5819 Evaluating and Using Research in Organizations and Education
A-F only, 3 credit(s);
Instructor: Peterson,Shari L
Description: Student may contact the instructor or department for information.

OLPD 5823 Work-Based Learning Policies
2 credit(s);
Instructor: Brown,James Marce
Description: Student may contact the instructor or department for information.

OLPD 5829 Course Development for Business and Industry
A-F only, 2 credit(s);
Instructor: Wegener, Inger Ann  
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: Twohig, Catherine Carol  
Description: Student may contact the instructor or department for information.

OLPD 6402 Integrative Leadership Seminar  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: MGMT 6402;  
Instructor: White, Katie Marie  
Description: This is an interdisciplinary, 3-credit seminar led by co-instructors from multiple schools of the university. Students will: a) learn to recognize and diagnose integrative leadership challenges and opportunities; b) build their own capacities to practice integrative leadership through group work in individualized peer-to-peer coaching in diverse teams and through being exposed to a range of boundary work practices; and c) gain better knowledge of the leadership contexts within their own profession and in other sectors. We emphasize contexts for integrative leadership at five basic levels: within individuals, within and across groups, within and across organizations, within and across sectors, and at the societal scale. Learning occurs through reading foundational materials, personal leadership coaching, engaging extensively with examples from guest speakers and case materials, developing a group capstone project on integrative leadership, and iteratively co-producing an understanding of what integrative leadership is. This course is sponsored by four departments. If PA 5105 shows as full, please check for space under the other departments - MGMT 6402, OLPD 6402, and PubH 6702. They are all for the same class, with the same instructors, meeting at the same time. Every section in all four schools must be filled before any over-ride permission numbers are issued. If all class sections are full, please contact Merrie Benasutti at the Center for Integrative Leadership (624-8300) for a permission number.  
Style: 15% Lecture, 20% Discussion, 25% Small Group Activities, 10% Student Presentation, 15% Guest Speakers, 15% Web Based.  
Grading: 30% reports/papers, 30% reflection paper, 20% class participation, 20% other evaluation. Participation in class-based learning and discussion - 20% Biweekly reading notes and biweekly reflection notes - 30% Team case study project research, presentation, and report - 30% Integrative leadership peer-to-peer coaching: 20%

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 8087 Seminar: Educational Policy and Administration  
1-3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Dejaeghere, Joan Geralyn  
Description: Student may contact the instructor or department for information.

OLPD 8095 Problems: Educational Policy and Administration  
1-3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Goh PhD, Michael P.  
Description: Student may contact the instructor or department for information.

OLPD 8101 International Education and Development  
A-F only, 3 credit(s);  
Instructor: Dejaeghere, Joan Geralyn  
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 8302 Educational Policy Perspectives
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 8595Credit 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: 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: Weerts, David J
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 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, James Marce
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, James Marce
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
Otho 7112 Diagnosis & Treatment Planning  
**A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;**  
**Instructor:** Vayda, Patricia Macchiarul  
**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:** Langsjoen, Erik Dean  
**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  
**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.

**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 7010 Fundamentals of Pediatric Dentistry  
**A-F only, 0-2 credit(s), max credits 2, 1 completion allowed;**  
**Instructor:** STAFF  
**Description:** Student may contact the instructor or department for information.

PDen 7100 Advanced Clinical Pediatric Dentistry
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

PDen 8010 Pediatric Dentistry Diagnosis and Treatment Planning
S-N only, 1 credit(s), max credits 5, 5 completions allowed;
Instructor: Karp, Jeff
Description: Student may contact the instructor or department for information.

PDen 8100 Hospital Pediatric Dentistry
S-N only, 1 credit(s);
Instructor: Karp, Jeff
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, Jeff
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
A-F only, 2 credit(s);
Instructor: Potegal, Michael
Description: Student may contact the instructor or department for information.

Pharmaceutics  9-177 Weaver-Densford Hall

Phm 8100 Seminar: Pharmaceutics
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Elmquist, William Frederick
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: Siegel, Ronald Alan
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.

Pharmacology  6-120 Jackson Hall

Phcl 2001 Basic Principles of Pharmacology: A Drug’s Fantastic Voyage
A-F only, 2 credit(s);
Instructor: Connell, Gregory James
Description: This new course introduces the basics of pharmacology by following the voyage of a drug from its site of administration through to its site of action and eventual elimination from the body. The focus will be on the core principles affecting a drug’s activity in the body. It is highly appropriate for those students interested in basic research, medicine, or the pharmaceutical industry and fulfills requirements for the Pharmacology minor. Since pharmacology is at the intersection of biochemistry, chemistry, genetics, physiology and medicine, the course will explore relationships among several different
disciplines that may not have been previously realized. The class is well suited for those who have not already taken biochemistry and upper division biology courses; first-year chemistry is the only pre-requisite. The format will be highly interactive, with structured student learning developed primarily through classroom discussions, problem sets, and written exams.

**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, 2 credit(s);  
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  
Description: Student may contact the instructor or department for information.

**Phcl 4994 Directed Research**  
S-N only, 1-3 credit(s), max credits 12, 4 completions allowed;  
Instructor: Wei, Li-Na  
Description: Student may contact the instructor or department for information.

**Phcl 5109 Problems in Pharmacology**  
1-18 credit(s), max credits 18, 1 completion allowed;  
Instructor: Loh, Horace H  
Description: Student may contact the instructor or department for information.

**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 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: Cortese PharmD, Angela Marie
Description: This is not a self-study course. While it is completely online, there are deadlines for assignments and assessments throughout the semester. No late registrations will be accepted. This course is designed for students seeking an overview of the profession of pharmacy, including the pharmaceutical care practice model, various pharmacy settings, pharmacy education and current opportunities and challenges within the profession. Students use LMS to view audio-narrated presentations and download handout materials (also available for purchase). Course information is sent to the U of M email addresses of registered students shortly before, and/or on, the first day of classes each Fall, Spring, and Summer term. For more information, contact 612 624 7976.

Phar 1002 Health Sciences Terminology
2 credit(s);
Instructor: Lichtblau PhD, Leonard
Description: Interested in learning the difference between an antigen and an antibiotic? During this course, you’ll not only increase your medical vocabulary by more than 2500 words in a self-paced manner, you will also learn to identify and articulate a wide variety of medical conditions and processes. The many means of communicating medically-relevant disease states, procedures, and diagnostics in health care can sometimes seem like another language. This course will help you recognize medical abbreviations, understand surgical procedures and comprehend the meaning of medical terminology by analyzing words at their roots. If you are interested in the healthcare fields or would like to understand more about your own medical care, we encourage you to learn more in this course. This is a completely online self-paced course. Students may complete the course before the end date of the term. Exams utilize online test proctoring. For more information, contact phar1002@umn.edu or 612-624 7976.
Style: 100% Web Based.
Exam Format: multiple choice

Phar 1003 Non-Prescription Medications and Self-Care: Treating Minor Conditions
2 credit(s);
Instructor: Milone PharmD, Anna S
Description: Many patients are interested in having control over their healthcare choices, and as a result, turn to self-medication therapies like over-the-counter drugs and natural, holistic solutions. These solutions, called nonprescription medications, comprise a large market within the healthcare industry. Throughout this course, you'll learn about these medications and other self-care remedies available to treat many different medical conditions. Topics discussed include allergies, cough and cold, pain, diarrhea and constipation, insomnia, smoking cessation, medication use in children and the elderly, methods of birth control, and the use of dietary supplements. For each condition discussed, you will learn basic causes, signs and symptoms, basic self-care guidelines, and when to see a health care provider. This course will help you gain a better understanding of how nonprescription and self-care products can be used safely and effectively. Additionally, you will explore various drug information resources, and will learn how to find reliable sources of drug information both on the internet and from your pharmacist. This online class is primarily self-paced, with modules made up of lectures, handouts, learning activities, and online class discussions. Students may choose to work ahead in the course. Exams utilize online test proctoring. For more information, contact phar1003@umn.edu or 612-624 7976
Style: 100% Web Based.

Phar 1004 Common Prescription Drugs and Diseases
2 credit(s);
Instructor: Cortese PharmD, Angela Marie
Description: Are you interested in understanding how some of the most common prescription medications work, why they are used, and how they should be used when treating common ailments? Perhaps you would like to recognize the most common causes of specific diseases, identify their symptoms and recognize the diagnostic criteria associated with them. Throughout this course, you will learn why some medications can’t be used by certain people, understand how prescription drugs are regulated and examine the correlation between common prescription drugs and diseases. Topics covered in this class range from drug regulation and advertising to depression to hypertension and high cholesterol. Additionally, you will explore various drug information resources, and will learn how to find reliable sources of drug information. This class is primarily self-paced, with modules made up of learning activities, lectures, reflection questions and online class discussion. There will be due-dates for certain aspects at times throughout the semester. Students may choose to work ahead in the course. Exams utilize online test proctoring. For more information, contact phar1004@umn.edu or 612-624 7976
Style: 100% Web Based.

Phar 1005 Introduction to Drug Therapies of Addiction: Medicine or Menace?
2 credit(s);
Instructor: Lichtblau PhD, Leonard
Description: This online two credit course provides students with the opportunity to explore the drug therapy (pharmacotherapy) of addiction. Through audio-narrated presentations, handouts, and additional online resources, students will gain basic drug therapy knowledge in the area of addiction; including, but not limited to topics such as 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 (e.g. Ritalin), as well as the drug therapy of addiction (e.g. Methadone) will also be covered. For more information, contact phar1005@umn.edu or 612-624 7976
Style: 100% Web Based. This is a self-study course with one deadline for all coursework. Students may complete the course before the end date of term.
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 Orientation to Health Literacy and Communication
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. For more information, contact phar1006@umn.edu or 612-624 7976
Style: 100% Web Based.

Phar 3206 Issues in Health Literacy and Communication
A-F only, 3 credit(s); The Twin Cities online Phar 3206 and 5206 are equivalent to the online Duluth Phar 3206 and 5206 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 5206;
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. For more information, contact phar3206@umn.edu or 612-624 7976

Phar 3207 Directed Study: Leadership in Health Care
A-F only, 3 credit(s); Completely Online 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: Positive change in this world requires leadership. And even though the term ?leadership? is freely tossed around by people and organizations, few of us possess a solid understanding of our own unique leadership perspective and potential. This Leadership in Health Care course provides an interactive, student-centered platform to develop students? personal leadership skills, knowledge, and practices, while applying leadership theories to create the groundwork for positive change in health care settings. The course is made up of three (3) modules: The individual perspective, the team perspective, and the organizational perspective. Module 1 explores students? individual leadership perspective. Content will involve: personal experiences, a variety of applied leadership theories, and an understanding of the differences between leadership and management. Module 2 provides leadership skills: effective communication, conflict management, quality improvement, and building teams. Module 3 delves further into the organizational perspective in health care, including policy and health care outcomes, quality assurance, accountable organizations, and change management in health care organizations.
Style: 100% Web Based.
Grading: 1. 15% - Journal Reflections 2. 25% - Discussion postings/week 3. 30% - Leadership projects 4. 20% - Team Learning Project 5. 10% - Learning Scenario Activities

Phar 3601 Basic Human Physiology for the Health Professions
A-F only, 3 credit(s);
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. For more information, contact phar3601@umn.edu or 612-624 7976
Style: 100% Web Based. There are five (5) required exams worth 50 points each which are timed and administered online through Moodle. 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: Cortese PharmD, Angela Marie
Description: Pharmacotherapy, the treatment of disease through the administration of medications, is a field particularly interesting to many healthcare workers. This course is designed to introduce you to some of the main drug classes available for the treatment of particular diseases. You will also learn about basic pharmacology, recognize brand and generic drug names and explore their common uses and therapeutic classes. A basic understanding of treatment options available for common disease states will also be developed during this course. Additionally, the course develops basic proficiency in the use of drug information resources. This class is made up of 3 sections, with due dates throughout the semester. Learning modules are made up of study guides, drug information activities, online lectures, and handouts. For more information, contact phar3700@umn.edu or 612-624 7976
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: Cortese PharmD, Angela Marie
Description: This online course provides enrolled nursing and respiratory care students with a general understanding of drug therapy and its implications in patient care. (See course website for exact prereqs for each health professional program.) There is no textbook for this course. Students use Vista to: view audio-narrated powerpoint presentations, download handout materials, complete self-assessments, and take exams. Course information is sent to the U of M email addresses of registered students shortly before, and/or on, the first day of classes each Fall and Spring term. For more information, contact 612 624 7976
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: This course prepares students to be informed and responsible participants in debates related to medication use within the U.S. health care system. Medication development, regulation, and distribution in the U.S. are explored along with the business, political, legal, and ethical issues involved. Through weekly reading and writing assignments, students identify and substantiate their own stance on issues, communicate ideas, persuade others, and defend viewpoints. This course fulfills a liberal education writing intensive requirement. For more information, contact phar4200@umn.edu or 612-624 7976.
Style: 100% Web Based.

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. marihuana, 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 4293 Directed Research I - Undergraduate
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Peterson, Marnie Lorraine
Description: Student may contact the instructor or department for information.

Phar 4293 Directed Research I - Undergraduate
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Remmel, Rory P
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 Credit will not be granted if credit has been received for: PHAR 4200W;
Instructor: Milone PharmD, Anna S
Description: This graduate student course prepares students to be informed and responsible participants in debates related to medication use within the U.S. health care system. Medication development, regulation, and distribution in the U.S. are explored along with the business, political, legal, and ethical issues involved. Through weekly reading and writing assignments, students identify and substantiate their own stance on issues, communicate ideas, persuade others, and defend viewpoints. For more information, contact phar5200@umn.edu or 612-624 7976.
Style: 100% Web Based.

Phar 5201 Applied Health Sciences Terminology
2 credit(s);
Instructor: Lichtblau PhD, Leonard
Description: Interested in learning the difference between an antigen and an antibiotic? During this course, you?ll not only increase your medical vocabulary by more than 2500 words in a self-paced manner, you will also learn to identify and articulate describe a wide variety of medical conditions and processes. The many means of communicating medically-relevant disease states, procedures, and diagnostics in health care can sometimes seem like another language. This course will help you recognize medical abbreviations, understand surgical procedures and comprehend the meaning of medical terminology by analyzing words at their roots. For more information, contact phar5201@umn.edu or 612-624-7976.
Phar 5205 Obesity: More than Just a Prescription
A-F only, 2 credit(s);
Instructor: Milone PharmD, Anna S
Description: The current epidemic of obesity in our nation/world requires us to train individuals in the health care professions, including pharmacy, medicine, dentistry, public health, along with nutrition/dietetics, to be better equipped to address this epidemic. This obesity course will cover 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, its contributing mechanisms, nutrition assessment, medical nutrition therapy, as well as considerations in its treatment and prevention throughout the lifecycle and beyond. By providing all health care professionals and others in related fields the necessary information to address this current epidemic, this epidemic, in turn, may be reduced and eventually obliterated.
Style: 100% Web Based.

Phar 5206 Applied Health Literacy and Communication
A-F only, 3 credit(s); The Twin Cities online Phar 3206 and 5206 are equivalent to the online Duluth Phar 3206 and 5206 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 3206;
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. For more information, contact phar5206@umn.edu or 612-624-7976
Style: 100% Web Based.

Phar 5207 Directed Study: Applied Leadership in Health Care
A-F only, 3 credit(s); advanced undergraduates, professional health care students, grad students 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 3207;
Instructor: Fierke, Kerry K
Description: Positive change in this world requires leadership. And even though the term “leadership” is freely tossed around by people and organizations, few of us possess a solid understanding of our own unique leadership perspective and potential. This Leadership in Health Care course provides an interactive, student-centered platform to develop students? personal leadership skills, knowledge, and practices, while applying leadership theories to create the groundwork for positive change in health care settings. The course is made up of three (3) modules: The individual perspective, the team perspective, and the organizational perspective. Module 1 explores students? individual leadership perspective. Content will involve: personal experiences, a variety of applied leadership theories, and an understanding of the differences between leadership and management. Module 2 provides leadership skills: effective communication, conflict management, quality improvement, and building teams. Module 3 delves further into the organizational perspective in health care, including policy and health care outcomes, quality assurance, accountable organizations, and change management in health care organizations.
Style: 100% Web Based.
Grading: 1. 15% - Journal Reflections 2. 25% - Discussion postings/week 3. 30% - Leadership projects 4. 20% - Team Learning Project 5. 10% - Learning Scenario Activities

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: Cortese PharmD, Angela Marie
Description: This course is designed for students pursuing careers that require them to have a basic familiarity with drug therapy. This course is offered totally online and will focus on recognition of brand and generic drug names, their therapeutic classes and common uses. In addition, participants will develop a basic proficiency in the use of drug information resources. With the competencies developed, participants of the course can expect to better review medication lists and work with health communication/documentation. As compared to Phar 3700, Phar 5700 participants will complete a multimedia project on a drug-related topic of their choosing, in addition to completing additional learning modules on subjects appropriate to their profession.
Style: 100% Web Based.

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;
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: See attached syllabus

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: Panagopoulos, Anastasia
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. To better understand ethics, you will be asked not only to study traditional texts, but also to apply the theories presented in the texts to particular ethical dilemmas.
Style: Online
Grading: See attached syllabus

Phil 1004W Introduction to Political Philosophy
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1004V; Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
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. exams

**Exam Format:** In class essay exams (midterm and final)

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**Phil 1005 Scientific Reasoning**

4 credit(s);[1st or 2nd yr student or instr consent Credit will not be granted if credit has been received for: PHIL 1005H;]

**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

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**Phil 1005H Scientific Reasoning**

4 credit(s);[1st or 2nd yr honors student or instr consent Credit will not be granted if credit has been received for: PHIL 1005;]

**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

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**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:** Laine, Patrick O

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

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**Phil 1007 Introduction to Political Philosophy Practicum**

1 credit(s);

**Instructor:** Holtman, Sarah Williams
Phil 1905 Topics: Freshman Seminar: Mind, Matter & Me  
A-F only, 3 credit(s), max credits 6;  
Instructor: Owens, Joseph I  
Description: Student may contact the instructor or department for information.

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 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; ecocentrism; interconnections among gender, race/ethnicity, class and environmental harms or illnesses; environmental racism; "green economics;" the greening of spirituality. The "theoretical" issues include: animal welfarism; 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.  
Style: Online  
Grading: See attached syllabus

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: Stoner, Ian M  
Description: Student may contact the instructor or department for information.

Phil 3305 Medical Ethics  
4 credit(s);  
Instructor: Kringel, Kirsten  
Description: Student may contact the instructor or department for information.

Phil 3307 Social Justice and Community Service  
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics  
Instructor: Wallace, John R  
Description: This course explores four questions: What is good learning (good education)? What is good work (or what is vocation)? What is a good life? What is a good society? The method of inquiry used in the course is philosophical. It is alert to noticing and bringing into the open hidden assumptions and presuppositions. The course will use an approach to learning which goes by various names: circle of inquiry, circle of culture, community of inquiry, "learning circles." This is an approach to learning in which a group learns collaboratively by (i) each member contributing his or her own voice and ideas, and listening to the voices and ideas of others in the group, and (ii) inviting into the circle and listening to other voices—the voices of writers or speakers who by virtue of life experience and thoughtfulness contribute to the inquiry which is centered in the in-class circle of inquiry. A further essential aspect of the approach to learning in the course is that each student in the course will do work in the community to meet human needs for at least three hours per week throughout the semester. This course carries 4 credits and meets two of the CLE theme requirements: Citizenship/Public Ethics and
Cultural Diversity.

**Style:** 15% Lecture, 85% Student Presentation.

**Grading:** 50% reflection paper, 50% class participation.

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**Phil 3311W Introduction to Ethical Theory**
- 4 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Herr, Mark Zimmerman
- **Description:** Student may contact the instructor or department for information.

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**Phil 3601W Scientific Thought**
- 4 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Powers, John D
- **Description:** Student may contact the instructor or department for information.

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**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.

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**Phil 4231 Philosophy of Language**
- 3 credit(s);
- **Instructor:** Hanks, Peter William
- **Description:** Language makes us all mind readers. By listening to the noises that people produce and the marks they write on pieces of paper you can read their minds. And by making your own noises and marks you can let other people read your mind. How is this possible? How do these noises and marks allow us to communicate with each other? This is the subject of philosophy of language. We will start with something seemingly very simple: proper names. What is the meaning of a proper name? How do we use proper names to talk about things in the world? This question seems deceptively easy to answer, but in fact it is one of the most vexed questions in contemporary philosophy. We will also cover several other major philosophical issues about meaning and linguistic communication. No previous experience in philosophy is required, although some experience with logic is highly recommended.
- **Style:** 70% Lecture, 30% Discussion.
- **Grading:** 40% final exam, 60% reports/papers.
- **Exam Format:** Short answer

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**Phil 4321W Theories of Justice**
- 3 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** STAFF
- **Description:** John Rawls wrote that "justice is the first virtue of social institutions," and most political philosophers would probably agree. The agreement ends, however, when the precise nature of justice, and of those institutions, is further explored. This course will familiarize students with concept of justice as articulated by leading philosophers from Locke to Rawls, as well as explore recent critiques of the concept of distributive justice proposed by feminist philosophers and critical race theorists. By the end of the course, students will have a solid grasp of the strengths and weaknesses of the liberal concept of distributive justice. The course will be taught in a seminar style, and students will be responsible for presenting some of the material to the class.
- **Style:** 20% Lecture, 40% Discussion. student presentations
- **Grading:** 20% mid exam, 40% reports/papers, 20% in-class presentation, 20% class participation.
- **Exam Format:** essay and short answer

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**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).
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: Mason, Michelle N
Description: Student may contact the instructor or department for information.

Phil 4995H Honors Senior Project
A-F only, 1 credit(s);
Instructor: Mason, Michelle N
Description: Student may contact the instructor or department for information.

Phil 5201 Symbolic Logic I
4 credit(s);
Instructor: Kac, Michael B
Description: Student may contact the instructor or department for information.

Phil 5603 Scientific Inquiry
3 credit(s);
Instructor: Waters, C. Kenneth
Description: We will examine the problem of how data, collected via experimentation or otherwise, can serve as statistical evidence for or against scientific hypotheses. There are several opposing schools of thought about how the relation between data and hypothesis should be conceptualized including hypothesis testing, estimation theory, Bayesian inference, decision theory, likelihood inference, and the maximum entropy approach. The course will begin by tracing the historical roots of the problem of statistical inference and will reveal how the opposing schools of thought have emerged. Then we will discuss the various shortcomings and objections for each of the main current approaches. Our historical and philosophical exploration will show that there is no short and simple answer to the problem of statistical inference, in part because the opposing schools of thought depend on conflicting intuitions about what demands should be placed on the procedures of statistical inference. Prerequisites: Basic acquaintance with the mathematics of probability theory. Format: Lecture (about 80%); discussion (about 20%). Requirements: Weekly reading and weekly submission of question about the reading. Midterm and final take-home exams.

Phil 5606 Philosophy of Quantum Mechanics
3 credit(s);
Instructor: Uffink, Jos
Description: Student may contact the instructor or department for information.

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 8081 Seminar: History of Philosophy--Ancient Philosophers
3 credit(s);
Instructor: Peterson, Sandra Lynne
Description: The course will consider Socrates, Plato, and Aristotle. A background question will be: what does each of these ancient philosophers think philosophy is? The focusing question of the course will be: what exactly, according to each of these ancient philosophers, is the question and answer conversation called "dialectic" and what does it have to do with philosophy? We will get our view of Socrates from his portrayal in Plato's works, including the Apology, Euthyphro, Laches and Theaetetus. We will arrive at our understanding of Plato by considering his portrayal of Socrates and other characters. We will study parts of Aristotle's Topics, which is a collection of rules for a certain kind of dialectic, and parts of Aristotle's Metaphysics, especially his discussion of the law of non-contradiction.

Phil 8133 Feminist Theories of Knowledge
Phil 8180 Seminar: Philosophy of Language
3 credit(s), max credits 6;
Instructor: Owens, Joseph I
Description: Student may contact the instructor or department for information.

Phil 8670 Seminar: Philosophy of Science
3 credit(s), max credits 6;
Instructor: Tostevin, Gilbert B
Description: Student may contact the instructor or department for information.

Physical Education  220 Cooke Hall

PE 1007 Beginning Swimming
OPT No Aud, 1 credit(s);
Instructor: Novotny, Jessica Lynn
Description: Student may contact the instructor or department for information.

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 1012 Beginning Running
OPT No Aud, 1 credit(s);
Instructor: Hippen, Lois Margarete
Description: Student may contact the instructor or department for information.

PE 1012 Beginning Running
OPT No Aud, 1 credit(s);
Instructor: Lundstrom, Christopher J
Description: Student may contact the instructor or department for information.

PE 1014 Conditioning
PE 1014 Conditioning
OPT No Aud, 1 credit(s);
Instructor: Tholen, Jillian Theresa
Description: Student may contact the instructor or department for information.

PE 1014 Conditioning
OPT No Aud, 1 credit(s);
Instructor: Lundstrom, Christopher J
Description: Student may contact the instructor or department for information.

PE 1015 Weight Training
OPT No Aud, 1 credit(s);
Instructor: Schulz, Skylar R
Description: Student may contact the instructor or department for information.

PE 1015 Weight Training
OPT No Aud, 1 credit(s);
Instructor: Betker, Morgan R
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 1015 Weight Training
OPT No Aud, 1 credit(s);
Instructor: Stephens, Greg
Description: Student may contact the instructor or department for information.

PE 1016 Posture and Individual Exercise
OPT No Aud, 1 credit(s);
Instructor: Borcherding, Bria Jordan
Description: Student may contact the instructor or department for information.

PE 1029 Handball
OPT No Aud, 1 credit(s);
Instructor: Hiber, Matthew Frank
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: 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: Student may contact the instructor or department for information.

PE 1034 Judo
OPT No Aud, 1 credit(s);
Instructor: Crone, Thomas William
Description: Student may contact the instructor or department for information.
PE 1035 Karate
OPT No Aud, 1 credit(s);
Instructor: Fusaro, Robert L
Description: Student may contact the instructor or department for information.

PE 1036 Racquetball
OPT No Aud, 1 credit(s);
Instructor: Hoffman, Mitchell Lee
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

PE 1038 Beginning Tennis
OPT No Aud, 1 credit(s);
Instructor: Sanny, John H
Description: Student may contact the instructor or department for information.

PE 1038 Beginning Tennis
OPT No Aud, 1 credit(s);
Instructor: Haertl, Daniel Thomas
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: Student may contact the instructor or department for information.

PE 1044 Self-Defense
OPT No Aud, 1 credit(s);
Instructor: Brandl, Mary Kathryn
Description: Student may contact the instructor or department for information.

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: 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: Student may contact the instructor or department for information.
PE 1053 Ice Skating
  OPT No Aud, 1 credit(s);
  Instructor: Anderson,Kristina
  Description: Student may contact the instructor or department for information.

PE 1055 Golf
  OPT No Aud, 1 credit(s);
  Instructor: Schulze,Gregory Alan
  Description: Student may contact the instructor or department for information.

PE 1055 Golf
  OPT No Aud, 1 credit(s);
  Instructor: Benoit,Luke
  Description: Student may contact the instructor or department for information.

PE 1055 Golf
  OPT No Aud, 1 credit(s);
  Instructor: Manthis,James Thomas
  Description: Student may contact the instructor or department for information.

PE 1065 Beginning Tumbling and Gymnastics
  OPT No Aud, 1 credit(s);
  Instructor: Campbell,Julia Faith
  Description: Student may contact the instructor or department for information.

PE 1067 Basketball
  OPT No Aud, 1 credit(s);
  Instructor: Hopkins,Christopher William
  Description: Student may contact the instructor or department for information.

PE 1071 Beginning Cricket
  OPT No Aud, 1 credit(s);
  Instructor: Peterson,Charles E
  Description: Student may contact the instructor or department for information.

PE 1072 Soccer
  OPT No Aud, 1 credit(s);
  Instructor: Curtis,John D
  Description: Student may contact the instructor or department for information.

PE 1072 Soccer
  OPT No Aud, 1 credit(s);
  Instructor: Adamcsek,Viktor Istvan
  Description: Student may contact the instructor or department for information.

PE 1074 Beginning Volleyball
  OPT No Aud, 1 credit(s);
  Instructor: Shingles,Kori Elizabeth
  Description: Student may contact the instructor or department for information.

PE 1074 Beginning Volleyball
  OPT No Aud, 1 credit(s);
  Instructor: Schulz,Skylar R
  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 1078 Ultimate Disc
OPT No Aud, 1 credit(s);
Instructor: Williams,Gregory Donald
Description: Student may contact the instructor or department for information.

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
OPT No Aud, 1 credit(s);
Instructor: Shingles,Kori Elizabeth
Description: Student may contact the instructor or department for information.

PE 1205 Scuba and Skin Diving
OPT No Aud, 1 credit(s);
Instructor: Karl,Robert J
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: Student may contact the instructor or department for information.

PT 6002 Ethics in Public Health: Research and Policy
S-N only, 1 credit(s), max credits 2;
Instructor: Picard,Kathleen Marie
Description: Student may contact the instructor or department for information.

PT 6213 Clerkship I
A-F only, 2 credit(s);
Instructor: Lojovich,Jeannne 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,Jeannne 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 studentCredit will not be granted if credit has been received for: PMED 5231;
Instructor: Ludewig,Paula M
Description: Principles of biomechanics. Forces/structures internal/external to body responsible for normal human

**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:** Musselman, Jessica R B
- **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:** Koehler, Linda Ann
- **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: Anderson, Kathleen
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: Koehler, Linda Ann
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: Lowe, Dawn Annette
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 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: 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: Kimberley, PT, PhD, Teresa Jacobson
Description: Student may contact the instructor or department for information.
Phys 1001 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: See attached syllabus
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
Grading: See attached syllabus

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 1401V Honors 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 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 discuss 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 University 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 1501V Honors Introduction to Mechanics
A-F only, 4 credit(s); One year of high school physics, one year of college-level calculus (or a grade of 5 on the BC-level AP calculus exam), Honors, permission of UHP. 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: Student may contact the instructor or department for information.

Phys 1905 Freshman Seminar
1-3 credit(s), max credits 6;
Instructor: STAFF
Description: 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 1905 Freshman Seminar: Quantum Physics for Everyone
2 credit(s), max credits 6;
Instructor: Goldman, Allen M
Description: Quantum physics for everyone. One of the greatest intellectual accomplishments of the Twentieth Century was the development of Quantum Mechanics, a field of physics which describes the counter-intuitive behavior of molecules, atoms, light and subatomic particles. Can you pass through a solid wall without disturbing yourself or the wall? An electron can and does repeatedly in many common semiconductor devices. Without an understanding of quantum mechanics, neither the transistor nor the laser could have been invented. A significant fraction of the entire economy is based on technological developments that derive directly from quantum mechanics. This class will examine, with a bare minimum of mathematics, the conceptual foundations of the strange world of the quantum as well as its connection with devices and systems that we take for granted in our everyday lives.

Phys 1905 Freshman Seminar: Science, Pseudoscience, or Fraudulent Science?
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 or pseudoscience 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 likely validity of scientific claims, and examples of consequences of a failure to do so. Case studies include cold fusion, bio-magnetic therapy, zero point energy, and high temperature superconductivity.

Phys 1910W Freshman Seminar: Writing Intensive
1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: STAFF
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
Phys 2403H Honors Physics III
A-F only, 4 credit(s);1402V, honors student and permission of University Honors Program Credit 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 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
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 Schroedinger 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 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
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: STAFF
Description: Introduction to the research activities of the School of Physics and Astronomy.

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 8300 Seminar: Biological and Medical Physics.
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Seminars on current research topics in biological and medical physics.

Phys 8500 Plan B Project
4 credit(s);
Instructor: STAFF
Description: Project topic arranged between student and instructor. Written report required.

Phys 8501 General Relativity and Cosmology I
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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
S-N only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Seminars on current research topics.

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

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

**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: 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: 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: Townsend DVM, DeWayne
- 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  250 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: Glazebrook, Jane
- 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: May, Georgiana
Description: Student may contact the instructor or department for information.

PBS 8994 Research
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: Tong, Cindy Bow San
Description: Student may contact the instructor or department for information.

Plant Biology  220 Biological Sciences Center

PBio 1212 Plant Biotechnology and Society
3 credit(s), max credits 6; Meets CLE req of Technology and Society
Instructor: Gantt, Steve
Description: This course is intended for everyone interested in how plants have interacted with humans throughout history. We will discuss the many ways plants have made and profoundly changed history from the noble (desire for spices leading to waves of exploration) to the savage (demand for sugar, cotton and tobacco as leading causes of slavery in the new world). Topics that may be covered include the domestication of crops that led to the modern civilization (and famine-causing diseases that have followed); how some crops interact with soil microbes reducing or eliminating the need for fertilization; the use of plants to make chemicals that can be medicinal, recreational or poisonous; how plants not only feed us, but also cloth and shelter us; plants that provide visual and culinary delights; and how modern biology is being used to create designer plants (and whether this is a good thing).
Style: 65% Lecture, 25% Discussion. 10% Greenhouse
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% quizzes.

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: Gantt, 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: Brambl, 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: 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: Wassenberg, Deena Marie
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: Libourel, Igor
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: 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
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.

PIPa 1942 Topics: Freshman Seminar: Antibiotics: Promise, Profits and Pitfalls
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Kinkel, Linda Lee
Description: Student may contact the instructor or department for information.

PIPa 2003 Plague, Famine, and Beer: The Impact of Microscopic Organisms on Human Civilization
3 credit(s);
Instructor: Arenz, Brett Evan
Description: This course is designed to examine the fundamental negative and positive influences that microscopic organisms (Bacteria, Fungi, Viruses, Protists) have had on shaping the course of human history. The effect of infectious disease on human populations and movements will be explored through analysis of historically important human and plant disease epidemics. Both the science of microbial biology and historical evidence will be emphasized and given equal scrutiny in this class. In addition to the malevolent microbes, the many marvelous microbes will be explored through their products and processes that are key components of ancient and modern living.
Style: 50% Lecture, 25% Discussion, 25% Small Group Activities.

PIPa 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.

PIPa 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

PIPa 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.
**PIPa 5202 Field Plant Pathology**
2 credit(s);
Instructor: Arenz, Brett Evan
Description: Student may contact the instructor or department for information.

**PIPa 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 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.

**PIPa 5444 Ecology, Epidemiology, and Evolutionary Biology of Plant-Microbe Interactions**
A-F only, 3 credit(s);
Instructor: Kinkel, Linda Lee
Description: Student may contact the instructor or department for information.

**PIPa 5444 Ecology, Epidemiology, and Evolutionary Biology of Plant-Microbe Interactions**
A-F only, 3 credit(s);
Instructor: Kinkel, Linda Lee
Description: Student may contact the instructor or department for information.

**PIPa 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 Topics 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: Teaching Experience**
1-2 credit(s), max credits 8, 1 completion allowed;
Instructor: Kurle PhD, James E.
Description: Student may contact the instructor or department for information.

**PIPa 8090 Advanced Procedures and Research in Plant Pathology: Microbes: Disease & Health in Animals, Plants & Hu**
PIPa 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 3001 Intermediate Polish
5 credit(s); 1102 or equiv Credit will not be granted if credit has been received for: PLSH 4103;
Instructor: Polakiewicz, Leonard Anthony
Description: This course covers the main aspects of advanced Polish and emphasizes proficiency in all four language skills: listening, reading, speaking, and writing. Four textbooks are used: Oscar Swan's "Intermediate Polish," Alexander Schenker's "Fifteen Modern Polish Short Stories," and two books of supplemental material developed by the instructor. All four textbooks are accompanied by high quality audio tapes. As part of the four semester Polish language sequence, the 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, Slavic Studies and potentially seeking employment in Eastern Europe.
Style: 30% Lecture. 70% Recitation and interactive activities; videos.
Grading: 60% quizzes, 20% written homework, 20% class participation.
Exam Format: Fill in the blank; translation into Polish; open-ended response.

Plsh 4103 Intermediate Polish
3 credit(s); 4102, [fourth sem course in another language or grad student] Credit will not be granted if credit has been received for: PLH 3001;
Instructor: Polakiewicz, Leonard Anthony
Description: See the description for Plsh 1103.

Plsh 5993 Directed Studies
1-3 credit(s), max credits 3, 1 completion allowed;
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.
Style: 60% Lecture, 20% Discussion, 20% Small Group Activities.
Grading: 50% mid exam, 25% final exam, 25% reports/papers.

Pol 1019 Indigenous Peoples: A Global Perspective
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: AMIN 1002; Meets CLE req of Global Perspectives
Instructor: Wilkins, David E
Description: This course focuses on the social, cultural and political relationship between selected indigenous peoples and the nation-states that settled in their territories and explores the various ways these states attempted to exterminate, incorporate, and segregate the native peoples they encountered. This class can be taken as an American Indian Studies course or a Political Science Studies course. It has been cross-listed. This course fulfills CLE requirements of Global Perspective Theme.
Pol 1025 Global Politics
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Krebs, Ronald R
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 is lodged 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 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 is lodged 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 1201 Political Ideas and Ideologies
4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Beaumont, Elizabeth
Description: This course examines political ideas and their role in the past and present. It is designed to help us become more reflective political thinkers and actors by analyzing key concepts, including freedom and equality, and exploring their relation to central questions about politics: What is a good or just political community? What kinds of values, institutions, leaders, and citizens does it require? What makes political power legitimate and when is rebellion justified? What are the rights and roles of the members of a political community? Seeking meaningful connections between the political concerns of the past and the problems that shape our own lives, we will explore ideas emerging from influential thinkers in several important eras: Ancient Greece and China (Plato, Confucius), to Renaissance Italy and North Africa (Ibn Khaldun, Machiavelli), the European Enlightenment (Hobbes, Locke, Rousseau, Mary Wollstonecraft, Mill), modern and 20th century thinkers (Marx, Freud, Franz Fanon, Martin Luther King, Jr., Malcolm X) as well as a few contemporary commentators (Francis Fukuyama, Khaled Abou El Fadl, M. A. Muqtadhar Khan, and Saba Mamoud). As we engage with these works, emphasis will be placed on developing your own interpretations and analyses, making sense of them in the historical contexts in which they are written, and reflecting on how these writers’ ideas connect to on-going political debates and challenges.
Style: 50% Lecture, 35% Discussion, 15% Small Group Activities.
Grading: 55% reports/papers, 35% quizzes, 10% other evaluation. 10% of grade In-class small group discussion exercises
Exam Format: 2 in-class quizzes are short critical response essays focused on analyzing course readings

Pol 1201 Political Ideas and Ideologies
4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Binay, Sema
**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, 30% Guest Speakers.  
**Grading:** 30% reports/papers, 20% written homework, 50% class participation.

**Pol 1905 Freshman Seminar: Who Are They to Judge? Courts, Rights, Democracy**  
3 credit(s);  
**Instructor:** Hilbink, Lisa  
**Description:** From campaign finance, national security, and health care to same-sex marriage, affirmative action, and women’s rights, courts decide many of the key policy issues of our day. Even lower-court judges are routinely involved in a broad array of processes that affect the life, liberty, and property of citizens and their families. So how can we ensure that the officials charged with such weighty decisions are in touch with and accountable to the diverse people they purport to serve? This seminar will address this question by examining arguments for and experiences with different approaches to securing democratic justice around the world. The course will begin with a conceptual and theoretical introduction, exploring arguments and critiques of the relationships between democracy, a rights-based rule of law, and judicial independence. The rest of the term, we will explore arguments over and experiences with different approaches to securing democratic justice, including: judicial training in particular role understandings; appointment, tenure, and override rules; diversity on the bench; judicial elections; and lay participation and oversight. Examples will be drawn both from the US and abroad, and the course will include guest speakers and perhaps even a field trip to a local court.  
**Style:** 40% Lecture, 30% Discussion, 10% Small Group Activities, 10% Student Presentation, 5% Field Trips, 5% Guest Speakers.  
**Grading:** 15% mid exam, 25% final exam, 30% reports/papers, 10% in-class presentation, 20% class participation.  
**Exam Format:** IDs and essay

**Pol 1942 Topics: Freshman Seminar: The Global Politics of Information Technology**  
3 credit(s); Meets CLE req of Technology and Society  
**Instructor:** Berliner, Daniel Phillip  
**Description:** Student may contact the instructor or department for information.

**Pol 3080 Faculty-Supervised Individual Internships**  
A-F only, 3-13 credit(s), max credits 15, 3 completions allowed;  
**Instructor:** Soper, Paul W  
**Description:** Student may contact the instructor or department for information.

**Pol 3085 Quantitative Analysis in Political Science**  
A-F only, 4 credit(s); Meets CLE req of Mathematical Thinking  
**Instructor:** Lucius, Andrew Michael  
**Description:** Student may contact the instructor or department for information.

**Pol 3108H Honors Tutorial: Thesis Preparation and Political Science Inquiry**  
A-F only, 3 credit(s);  
**Instructor:** Myers, C. Daniel  
**Description:** Student may contact the instructor or department for information.

**Pol 3225 American Political Thought**  
3 credit(s); Meets CLE req of Civic Life and Ethics
**Pol 3235W Democracy and Citizenship**  
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive  
**Instructor:** Tronto, Joan C  
**Description:** Democracy based on individual rights. Pluralism. Civic republicanism. Community activism. Dilemmas of democratic government/citizenship in race, class, gender-stratified society. During Fall 2013, we will focus especially on these issues: how important is "equality" in a democracy? Does politics always involve "dirty hands?" Is it OK for politicians to lie? What kinds of changes are needed for contemporary democracy to respond to the needs of today's citizens? For example, is there enough "public space" for democracy? Should the US Constitution or system of representation be changed? What does the "Occupy" movement teach us? Students will read texts, watch films, and present their learning to assist others to act more effectively as democratic citizens.  
**Style:** 50% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities.  
**Grading:** 33% final exam, 60% reports/papers, 6% class participation. Students whose work improves over the semester will receive a higher grade than a mere average would indicate.  
**Exam Format:** Final will consist of several essays.

**Pol 3235W Revolution, Democracy, and Empire: Modern Political Thought**  
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive  
**Instructor:** Luxon, Nancy  
**Description:** (Formerly POL 3252 Early Modern Political Thought. Students who previously enrolled in POL 3252 may not re-enroll in this course.) From the 16th through the 19th centuries, Europe and its colonies were wracked by large scale, sweeping changes: from the violent emergence of the sovereign state, to intense religious conflict, to transformative expansions into new economic markets. These changes posed extraordinary challenges to usual methods of conceiving of political order and governance. Our course this semester will read these changes through three key concepts: revolution, democracy, and empire. We will read primary historical sources, political pamphlets and treatises, and travel journals so as to study the effects on both the European context and beyond.  
**Style:** 70% Lecture, 30% Discussion.  
**Grading:** 45% reports/papers, 40% reflection paper, 15% other evaluation. Across the semester, students will also participate in "pop" in-class writing exercises.

**Pol 3310 Topics in American Politics: Food Politics**  
3 credit(s), max credits 6;  
**Instructor:** Rahn, Wendy Marie  
**Description:** From New York to California and places in between, food?how its grown, transported, processed, and consumed?is the subject of political contestation at all levels of government,, including the international system. This course takes a broad, interdisciplinary look at several contemporary ?food fights,? including the 2012 Farm Bill and proposals over so-called ?fat taxes,? to examine how various political actors interact in the complex policy arena that is food. We will explore the various resources, arguments, and evidence used by the participants in these conflicts, and investigate the institutional, cultural, and moral rules of engagement that provide the structure in which political contenders attempt to advance their interests. This course will be of interest to students in a variety of social science disciplines, as well students with interests in environmental, public health, or agricultural policy.

**Pol 3310 Topics in American Politics: Personality and Politics**  
3 credit(s), max credits 6;  
**Instructor:** Lavine, Howard G
There is a vast and longstanding literature in political psychology exploring the dispositional (i.e., personality) origins of political attitudes and ideology. Beginning with Adorno et al.'s (1950) classic work The Authoritarian Personality, psychologists and political scientists have sought to understand why some people gravitate toward political conservatism and others resonate toward moderate or liberal ideologies. The purpose of this course is to survey this literature. We will begin with an examination of two personality factors that are often linked to political preferences, namely "The Big 5" and authoritarianism. We will then broadly consider the biological underpinnings of political ideology and preference, including works on evolutionary psychology, neuroscience, and behavioral genetics. Following that, we will examine how personality conditions political persuasion, and how the effects of personality depend on political engagement. Finally, we will discuss the personality styles of political elites (e.g., presidents), and examine about how variation in the personalities of presidents affects their performance in office.

**Pol 3310 Topics in American Politics: Gender & Politics**
- 3 credit(s), max credits 6;
- **Instructor:** Marchetti, Kathleen Maeve
- **Description:** Student may contact the instructor or department for information.

**Pol 3321 Issues in American Public Policy**
- 3 credit(s);
- **Instructor:** Karch, Andrew Jonathan
- **Description:** This course examines the politics of social policy in the United States. The first half of the course places the United States in comparative perspective. Scholars often describe the United States as a laggard where social policies developed relatively late, grew relatively slowly, and are less generous than corresponding policies in other advanced industrial democracies. How accurate is this conventional wisdom? In what ways is the American welfare state unusual? How have political culture, interest groups, government institutions, and other factors contributed to the distinctive shape of American social policy? The second half of the course applies the analytical frameworks discussed in the first half of the course to contemporary trends in American social policy. It focuses on four specific policy areas: pensions, health care, education, and income support. In addition to examining the historical origins of existing programs in each of these policy areas, it also looks closely at the political and substantive impact of such contemporary reforms as charter schools and the Affordable Care Act.
- **Style:** 85% Lecture, 10% Discussion, 5% Small Group Activities.
- **Grading:** 45% mid exam, 30% final exam, 25% reports/papers. Grades for the course will be based on two midterm exams (worth 20% and 25%), a final exam (30%), a two-page health care policy analysis (10%), and a four-page education policy memo (15%).
- **Exam Format:** All exams will consist of multiple-choice questions, short identifications, and essay questions.

**Pol 3410 Topics in Comparative Politics**
- 3 credit(s), max credits 9, 3 completions allowed;
- **Instructor:** Araia, Semhar
- **Description:** Student may contact the instructor or department for information.

**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:** Mohammad-Zadeh JD, PhD, Kati
- **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 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: Munhazim, Ahmad Qais
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 3701 American Indian Tribal Governments and Politics
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: AMIN 3501; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Wilkins, David E
Description: This course examines the origins, status, structures, and powers of American Indian governments and the distinctive politics associated with these First Nations who constitute the third set of sovereign governments in the U.S. whose existence long predates the federal and state governments. This course fulfills CLE requirements of Social Science core and Citizenship and Public Ethics themes.
Style: 25% Lecture, 75% Discussion.
Grading: 20% mid exam, 20% final exam, 40% reports/papers, 20% other evaluation. weekly questions based on readings
Exam Format: long essays

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 3752 Chicana/o Politics
3 credit(s); Credit will not be granted if credit has been received for: CHIC 3852; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Duenes, Michael
Description: In this course we will explore multiple explanations for how and why the political and social relationships between Latin@s and non-Latin@s change. Students will explore how demographic changes in communities influence the political, social, and economic relationships between people. Why and how COINTEPRO infiltrated a Chicano organization in Denver that advocated for Chicano equal rights. How two Latinas created a successful model for women of color to work together to address the treatment of women within their communities AND the broader society's treatment of multicultural women. Students will learn the tremendous intellectual, social, and political effect this last movement created within Latin@ communities, multicultural communities, and society. By the end of the course students will know how to summarize and expand on an author's, while supporting their view, criticisms, and suggestions of that author's work.

Pol 3766 Political Psychology of Mass Behavior
3 credit(s); Meets CLE req of Social Sciences
Instructor: Lavine, Howard G
Description: This course examines the influence of human nature on political decision making among members of the mass public, asking questions about how human thought processes, emotions, and personality influence political judgments. Political theorists have long disagreed over basic human nature and have advanced different solutions to political governance as a consequence, ranging from participatory democracy to authoritarian regimes. In this course, we carefully consider how well we, as humans, are equipped to deal with different forms of political governance, especially democracy. We examine different aspects of human psychology, including personality, motivation, values, information processing, emotion and intergroup behavior, as well as proximal and distal biological processes (e.g., physiology,
politics, and consider their influence on political decision making. Readings are drawn from psychology and political science. No prior in-depth knowledge of either psychology or political science is needed to succeed in the course. It would help to have a general interest in politics, however. The course begins with an introductory reading in political psychology, designed to provide an overview of the field. We will then begin a section of the course on obedience to authority, which examines the power of social context and perceptions of legitimate authority in altering social and political behavior. We then consider the impact of group life on political preferences. To what extent do political preferences spring from our membership in groups and our views of other groups in society (including nations)? We will consider the impact of in-group attachments (to one’s race, gender or nation), followed by a consideration of how animosity towards outsiders can escalate into prejudice, or even genocide.

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 3835 International Relations

3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Jutila, Matti Antero
Description: World Politics is a theoretical discipline. It deals with entities like states and international organizations that are not directly observable. Various theories about the nature of these entities and relations between them offer us different views about world politics. This course is designed to provide the conceptual and theoretic means for analyzing issues, processes, and structures in global politics. Emphasis is placed on developing usable knowledge of influential theories for understanding international conflict, cooperation, and change, especially in the contemporary era. We will not limit our discussion to the mainstream American theories of international relations, but will also cover European and post-colonial perspectives on global politics. Topics covered by the class will include realist and constructivist views on international system of territorial states and the anarchic structure of that system, institutionalist explanations of international cooperation, so called English School’s views on the rules and institutions of international society, Feminist perspectives on gendered practices of global politics, and Postcolonial analyses of inequality and prejudice in the practice and study of global politics. We will investigate both the explanatory insights and the practical and normative political implications that distinguish a variety of theoretical perspectives on international relations. The course is intended to provide the means for students to develop their own theoretically informed analyses of issues in contemporary international relations.
Style: 60% Lecture, 5% Film/Video, 20% Discussion, 15% Small Group Activities.
Grading: 40% final exam, 30% quizzes. 30% Online discussion

Pol 3872W Global Environmental Cooperation

4 credit(s);Meets CLE req of Writing Intensive
Instructor: Bagozzi, Benjamin E
Description: Increasingly, global environmental issues?such as climate change, ozone layer depletion, biodiversity conservation, hazardous wastes transportation, and air pollution?have come to threaten the interests of nation-states and their citizens. Yet, the transnational nature of these environmental problems generally precludes individual governments, NGOs, or citizen-groups from solving these problems on their own. This course will therefore examine the extent to which
these latter actors have been able to successfully cooperate internationally to address global environmental threats. To do so, the course will focus upon four broad themes. We will begin by appraising a number of prominent ecosophical, political, economic, and legalistic perspectives on environmental problems in order to gain an understanding of how each unique perspective shapes our understandings of environmental problems (and their solutions). Second, we will then evaluate and compare the major global environmental problem areas of our time, as well as the determinants of their identification. Having identified these problem areas, we will next discuss how countries have come to manage these problems, paying particular attention to the creation and negotiation of international agreements. Finally, the fourth theme of this course will examine how effective these agreements have been in both ensuring states’ compliance and solving global environmental problems. Ultimately, students should leave this course with an appreciation of the complexity of international environmental problems, and their solutions, as well as an understanding of what makes for a successful international environmental agreement.

Pol 4210 Topics in Political Theory: Political Power of Ideas in Latin Amer Politics
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Yaffe Esposito, Jaime Gabriel
Description: Student may contact the instructor or department for information.

Pol 3501 Introduction to Political Science
1 credit(s);
Description: This course will cover a range of topics in political science, including political institutions, political behavior, and international relations.

Pol 4322 Rethinking the Welfare State
3 credit(s);
Instructor: Pryor, Tom
Description: Student may contact the instructor or department for information.

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, students will do a cumulative writing assignment, starting with a short essay early in the term and revising and enhancing the argument based on what they learn, or how their perspective changes, as the course progresses (this is a new approach beginning Fall 2013). The final assignment will be a "research-enhanced" version of the paper. To support this, writing and research tutorials and class activities are integrated into the course every few weeks.
Style: 50% Lecture, 30% Discussion, 20% Small Group Activities.
Grading: 30% mid exam, 50% reports/papers, 20% class participation.
Exam Format: IDs

Pol 4403W Comparative Constitutionalism
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Olson, Adam Kyle
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, students will do a cumulative writing assignment, starting with a short essay early in the term and revising and enhancing the argument based on what they learn, or how their perspective changes, as the course progresses (this is a new approach beginning Fall 2013). The final assignment will be a "research-enhanced" version of the paper. To support this, writing and research tutorials and class activities are integrated into the course every few weeks.
is central to Political Science. To hone this skill, students will do a cumulative writing assignment, starting with a short essay early in the term and revising and enhancing the argument based on what they learn, or how their perspective changes, as the course progresses (this is a new approach beginning Fall 2013). The final assignment will be a "research-enhanced" version of the paper. To support this, writing and research tutorials and class activities are integrated into the course every few weeks.

**Style:** 50% Lecture, 30% Discussion, 20% Small Group Activities.

**Grading:** 30% mid exam, 50% reports/papers, 20% class participation.

**Exam Format:** IDs

### 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); 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 4481 Governments and Markets

3-4 credit(s), max credits 4, 1 completion allowed; 1054 or instr consent Credit will not be granted if credit has been received for: POL 5481;

**Instructor:** Freeman, John Roy

**Description:** This course addresses the question of whether democracy and markets are compatible, whether democratic institutions enhance (undermine) the workings of market institutions and vice versa. Competing theoretical perspectives in the field of political economy are critically evaluated. And the experiences of countries with different forms of democratic market system are studied. Among the topics singled out for in-depth investigation are the economics of voting, politics of money management, political business cycles, and the politics of trade.

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

### 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/Trade, 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: Johnson, Timothy Russell
Description: This course is designed to introduce students to constitutional law, with an emphasis on the U.S. Supreme Court's interpretation of Articles I, II, and III.
Style: 50% Lecture, 50% Discussion.
Grading: 33% mid exam, 33% final exam, 33% reports/papers.

Pol 4502W The Supreme Court, Civil Liberties, and Civil Rights
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Beaumont, Elizabeth
Description: This course offers a powerful overview of the development of American constitutional law, with a focus on the civil rights and liberties reflected in the Bill of Rights and 14th Amendment. Reading landmark Supreme Court cases from the past and present, we will consider the constitutional principles, interpretations, and doctrinal developments these cases express, as well as considering the broader social and political contexts and controversies surrounding these cases.
Style: 60% Lecture, 25% Discussion, 10% Small Group Activities, 5% Student Presentation.
Grading: 25% mid exam, 30% reports/papers, 10% special projects, 10% written homework, 25% additional semester exams. Students will write and submit short "case briefs" as homework (10%), participate in an in-class Moot Court (10%), complete 2 essay exams (25% each), and write one paper (30%).
Exam Format: Essay exam

Pol 4502W The Supreme Court, Civil Liberties, and Civil Rights
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Gregory, Charles
Description: This course offers a powerful overview of the development of American constitutional law, with a focus on the civil rights and liberties reflected in the Bill of Rights and 14th Amendment. Reading landmark Supreme Court cases from the past and present, we will consider the constitutional principles, interpretations, and doctrinal developments these cases express, as well as considering the broader social and political contexts and controversies surrounding these cases.
Style: 60% Lecture, 25% Discussion, 10% Small Group Activities, 5% Student Presentation.
Grading: 25% mid exam, 30% reports/papers, 10% special projects, 10% written homework, 25% additional semester exams. Students will write and submit short "case briefs" as homework (10%), participate in an in-class Moot Court (10%), complete 2 essay exams (25% each), and write one paper (30%).
Exam Format: Essay exam

Pol 4771 Racial Attitudes and Intergroup Conflict
3 credit(s);
Instructor: STAFF
Description: This course will focus on critical comparative perspectives on race and ethnicity. Because race and ethnicity function differently in various parts of the world, it is instructive to consider questions of recognition, inclusion, equality and democracy through the comparative method. The first part of the course considers the similarities and differences between racial and ethnic identities. Historical patterns of inequality, economic relations and political institutions all interact and structure the way in which racial and ethnic diversity is managed and manipulated in different contexts. Key cases will highlight the way in which race and ethnicity serve as systems of stratification, as well as the various models of inter-group conflict resolution which have been tried throughout the world (cases will include US, Brazil, South Africa, Ethiopia, China, Australia, Iraq, France). Through case studies, films and popular news media, students will be asked to think globally and comparatively about inequality based on race and ethnicity. Finally, institutional and local solutions, in both national and international policy, will be considered.
Style: 80% Lecture, 20% Discussion.
Grading: 30% mid exam, 35% final exam, 25% reports/papers, 10% class participation.
Exam Format: Short answers and essays

Pol 4810 Topics in International Politics and Foreign Policy: Patronage and Corruption
3 credit(s), max credits 6;
Instructor: Hollyer, James
Description: This course examines dysfunction within the state apparatus -- in the specific forms of patronage, corruption, and clientelism -- and asks why such dysfunction persists and what factors drive it to change. The first half of the course will be devoted to patronage. It will examine the functioning of the patronage mechanism, both in the US and in other
national settings; ask when and why patronage is abandoned in favor of meritocracy; and will assess the relationship between merit reforms and changes in the quality of governance. The second half of the course will be devoted to corruption. Specific topics to be covered will include: an examination of different forms of corruption, both at the level of political leaders and of bureaucratic officials; the relationship between corruption, democracy, transparency and accountability; governments’ manipulation of corruption to provide incentives to bureaucratic and party officials; and different means of combating corruption. The course will conclude with an examination of the relationship between patronage, corruption and clientelism, with a particular focus on the mechanisms that cause the correlation between these different forms of mis-governance.

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 45% reports/papers, 40% reflection paper, 15% class participation.

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**Pol 4885W International Conflict and Security**

- **4 credit(s); Credit will not be granted if credit has been received for: POL 5885; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive**
- **Instructor:** Krebs, Ronald R
- **Description:** Soon after the fall of the Berlin Wall, many foresaw the birth of a new world order. Military strategy, strategic bombing and coercive diplomacy, deterrence and competence, signaling and the escalatory ladder--these concepts, staples of Cold War thinking, were believed to be outmoded, having little relevance to the emerging world. The events of the past decade have shown how wrong this conclusion was. Military force is as pertinent to international politics as ever. Unable to reap the peace dividend that was expected to accompany the end of bipolar conflict, the United States has since 1989 repeatedly deployed its military forces across the globe--from Kuwait to Somalia to Bosnia and Kosovo to Afghanistan to Iraq. These operations have sometimes ended in apparent success, other times in failure. This course explores central issues regarding the use of military force in international politics. Why do states turn to military force and for what purposes? What are the causes of war and peace? What renders the threat to use force credible? Can intervention in civil wars stall bloodshed and bring stability? Under what conditions is the use of force ethical, and when does it exceed those bounds? How effective is military force compared to other tools of statecraft? What is the future of military force in global politics? Through abstract theoretical readings, concrete historical cases, and contemporary policy debates, this course examines these questions and others.
- **Style:** 75% Lecture, 25% Discussion.

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**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 evaluation/advice by instructor, then revised for final submission.
- **Grading:** 100% reports/papers.
- **Exam Format:** None

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**Pol 5885 International Conflict and Security**

- **3 credit(s); grad student Credit will not be granted if credit has been received for: POL 4885W;**
- **Instructor:** Krebs, Ronald R
- **Description:** Student may contact the instructor or department for information.

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**Pol 8060 Research Proseminar in Political Science**

- **S-N only, 2 credit(s), max credits 8, 4 completions allowed;**
- **Instructor:** Sikkink, Kathryn A
- **Description:** Student may contact the instructor or department for information.

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**Pol 8060 Research Proseminar in Political Science**

- **S-N only, 2 credit(s), max credits 8, 4 completions allowed;**
- **Instructor:** Savelsberg, Joachim J
- **Description:** This course is co-taught by Timothy R. Johnson (Political Science) and Joachim Savelsberg (Sociology), incoming editors of the Law & Society Review, the official journal of the Law & Society Association and the world's leading journal in the field of law and society studies. This is the first offering in a series of six semesters. Johnson will take the lead in 2013/14, Savelsberg in 2014/15. Students will read submitted papers that receive 'revise and resubmit' decisions and the reviewers' comments and discuss them with the editors. Different students may take the lead on specific papers in line with their substantive and methodological interests and expertise. Suggestions developed during these discussions will be incorporated into the R&R letters the editors will send out to authors. Students will thus get immersed in a range of cutting edge work done in the field. They will further gain crucial insights into the decision making processes associated with journal publishing. In this respect the course is intended to be a major professionalization tool that should be most helpful to graduate students who prepare to enter academic careers in which publishing papers in journals will be a crucial component. The process should make for an engaging collaborative, intellectual and professional, experience.
- **Style:** 85% Discussion, 15% Student Presentation.
Grading: 20% in-class presentation, 80% class participation.

Pol 8106 Quantitative Political Science I
3 credit(s);
Instructor: Goren, Paul Nurullah
Description: Student may contact the instructor or department for information.

Pol 8160 Topics in Models and Methods: Questionnaire Design
1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Miller, Joanne Marie
Description: Student may contact the instructor or department for information.

Pol 8160 Topics in Models and Methods: Maximum Likelihood Estimation
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Bagozzi, Benjamin E
Description: Student may contact the instructor or department for information.

Pol 8260 Topics in Political Theory: French Marxism and Postcolonialism
3 credit(s), max credits 6;
Instructor: Luxon, Nancy
Description: Student may contact the instructor or department for information.

Pol 8301 American Politics
3 credit(s);
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: Miller, Joanne Marie
Description: Student may contact the instructor or department for information.

Pol 8337 Welfare State Theories and American Social Policy
3 credit(s);
Instructor: Karch, Andrew Jonathan
Description: Student may contact the instructor or department for information.

Pol 8401 International Relations
3 credit(s);
Instructor: Krebs, Ronald R
Description: Student may contact the instructor or department for information.

Pol 8403 International Norms and Institutions
3 credit(s);
Instructor: Sikkink, Kathryn A
Description: Student may contact the instructor or department for information.

Pol 8601 Introduction to Comparative Politics
3 credit(s);
Instructor: Caraway, Teri L.
Description: Student may contact the instructor or department for information.

Pol 8660 Topics in Comparative Politics: Comparative Labor Politics
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Caraway, Teri L.
Description: Student may contact the instructor or department for information.
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 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: 1300-1900
3 credit(s);Meets CLE req of Writing Intensive
Instructor: Beal, Sophia Funkhouser
Description: Student may contact the instructor or department for information.

Port 5530 Brazilian Literary and Cultural Studies
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Beal, Sophia Funkhouser
Description: FALL 2013: This course will tour Brazilian literature from its roots to the present, with an emphasis on the twentieth century. Reading novels, poems, plays, and short stories, we will examine literary progressions, cultural concerns, stylistic experimentation, and recurring themes that have shaped Brazilian literature. Primarily, we will read canonical texts by Brazil’s best known authors to provide a foundation in Brazilian literature. These writers include Machado de Assis, Oswald de Andrade, Carlos Drummond de Andrade, Joao Cabral de Melo Neto, Clarice Lispector, and Guimaraes Rosa, among others. We will also read key theoretical texts in the fields of Brazilian cultural studies and literary criticism. This course is taught in PORTUGUESE.

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.

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.
PsTL 732 Intermediate Algebra (Computer)

Description: A second 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 intermediate algebra at a level of difficulty and abstraction geared for students enrolled at a research university. To be successful you must enter the course being able to work with expressions, equations, exponents, polynomials, factoring, rational expressions and equations, and graphs. Course content includes roots, radicals, linear, quadratic, exponential, and logarithmic functions, 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 mini-quizzes, four 50 minute closed-book exams and a two hour comprehensive final. Calculators are allowed. Course prepares you for Math 1031 College Algebra or Math 1051 Precalculus I, as well as PsTL 1004 Statistics and PsTL 1006 Mathematical Modeling and Prediction (all of which satisfy the CLE Mathematical Thinking requirement).

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: Exams are problem oriented (e.g., Solve this equation); Exams are closed book but calculators are allowed.

PsTL 1004 Statistics: Understanding and Applying Data

Description: This 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, in-depth projects, writing assignments, demonstrations, and a lot 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 and to communicate using the language of statistics. Students will develop a level of statistical literacy

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: Exams are problem oriented (e.g., Solve this equation); Exams are closed book but calculators are allowed.
that enables them to critically assess information encountered in the media and other sources. This course will be of
particular interest to undergraduate students who want to fulfill the CLE requirement in Mathematical Thinking and know
that statistical thinking will complement their field of study.

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 1004 Statistics: Understanding and Applying Data
4 credit(s); Meets CLE req of Mathematical Thinking

Instructor: Duranczyk, Irene Mary

Description: This hybrid section of Statistics incorporates services learning. Students will work with a social agency to
analyze data or collect data to meet the organization's needs and demonstrate course goals. Although the schedule of
classes is biweekly, it will vary throughout the semester depending on service learning group projects and online Moodle
activities. This project-based 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, 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 students who want to fulfill the CLE requirement in Mathematical Thinking and know that
statistical thinking will complement their field of study.

Style: 25% Lecture, 20% Discussion, 45% Small Group Activities, 10% Student Presentation.

Grading: 30% mid exam, 20% reports/papers, 10% quizzes, 10% written homework, 10% journal, 10% reflection paper,
10% in-class presentation. Application of knowledge and problem solving are a part of the assignments, exams, papers,
and presentations.

Exam Format: Exams are a combination of short answer questions, problem solving, calculations, graphing and may
include some multiple choice.

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: 30% mid exam, 20% reports/papers, 10% quizzes, 10% written homework, 10% journal, 10% reflection paper,
60% 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);
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: Glynn, Natalie R
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: STAFF
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.
Exam Format: Multiple choice

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: 10% Lecture, 30% 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
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 Sociological Perspectives: A Multicultural America
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. We will then apply the major ideas to the world around us, including our observations from our service learning site. The purpose of this course is to provide you with the basic tools to better understand (and question) 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% reflection paper, 10% class participation.
Exam Format: multiple-choice

PsTL 1231 America's Past and Present: Multicultural Perspectives
4 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Poch, Robert Karl
Description: This course explores some of the major multicultural and human rights issues in American History -- primarily since 1865 -- from a variety of perspectives. The historical roots of our cultural diversity, the effects of various cultures on our national development, the cultural contributions of our various citizens, and our shared struggle as a nation are examined through a variety of print, audio, and video sources. We will also explore some of the promises of freedom and liberty made within key documents of the American past and who they benefited or ignored at different moments in time. The assigned textbook and readings are selected to provide the historical knowledge and multicultural perspectives to support the examination of those historical themes. Documents providing multicultural perspectives are examined to stimulate class discussion while issues and events are discussed and critiqued from a variety of historical perspectives. The dynamic nature of history as a discipline will also be addressed.

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: Miksch, Karen L
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 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. At the end of this course, you will be better able to analyze complex social problems and make informed decisions regarding the big issues of the day?thus, this course meets the central goal of a liberal education?making us all more informed and engaged citizens. The course also meets the University CLE requirement of Social Science Core, and the Civic Life and Ethics Theme. We will have the opportunity to explore, analyze, compare and argue issues in law, politics and society using a social science lens.
Style: 25% Lecture, 5% Film/Video, 25% Discussion, 25% Small Group Activities, 20% Student Presentation. All students will conduct a mock jury trial and play either the role of a witness or an attorney.
Grading: 30% reports/papers, 30% special projects, 20% quizzes, 10% reflection paper, 10% class participation. The Mock trial (special project) includes in class participation, a paper, and performance.
Exam Format: quizzes are multiple choice and short answer

PsTL 1251 Forces of Modern Historical Change: Global Perspectives
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Woodbury, Shawn Michael
Description: Student may contact the instructor or department for information.
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 is primarily interactive, where the goal is to bring alive the concepts you encounter in the text in your outside reading.
Grading: 18% special projects, 52% additional semester exams, 5% attendance, 13% reflection paper, 7% in-class presentation, 5% class participation. Extra credit opportunites make up approximately 10% of the points available in the course (66/620).
Exam Format: All exams are multiple choice. There are 4 semester exams made up of 40 questions each. Each exam covers 4 chapters from the text.

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, interpretation of literature, storytelling/spoken word) from the perspective of the 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, 15% Discussion, 15% Small Group Activities, 20% Student Presentation, 15% Field Trips, 15% Studio, 5% Guest Speakers, 5% Web Based. 2 out-of-class field trips, paid for by the course fee.
Grading: 20% reports/papers, 10% special projects, 20% written homework, 10% attendance, 10% journal, 20% in-class presentation, 10% class participation.

PsTL 1365W Stories of Self and Community: 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 1368 Stories of Self and Community: 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: Peter,Gary E
Description: In this course you will practice skills of literary analysis through an interactive and collaborative classroom designed to support diverse learning styles. You will also gain insight into identity development in diverse social contexts by engaging with literary works. While it is not possible for us to undertake an exhaustive survey of this immense body of work in just one semester, this course will provide you with a sampling of poetry, short fiction, drama, and non-fiction designed to raise a range of questions about American identity within broad social, historical, political, and literary contexts. We will also consider these questions as we read a memoir and a collection of short fiction. We will explore how U.S. literatures do what all literature does?describe what it means to be human and the conflicts arising out of the human experience?while portraying some of the specific challenges and conflicts experienced by the diverse peoples of the United States. Thus we will view the readings as a useful source of historical knowledge and as a means to critique how Americans in different social worlds protect or challenge those worlds. In this class, we?ll be working together to learn from and teach one another through discussion, writing, and exploration. Literary study is a social and intellectual practice: it requires not only a reader thinking about texts, but a reader in conversation with other readers who can help him or her consider the limitations and possibilities of his or her own ?take? on the text. Our class time will involve brief lecture, small group work and presentations, large group discussion, and in-class writing.
Style: 5% Lecture, 5% Film/Video, 50% Discussion, 20% Small Group Activities, 20% Student Presentation.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 20% quizzes, 10% in-class presentation, 10% class participation.

PsTL 1366 Stories of Self and Community: 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 Stories of Social Change: Global Perspectives
3 credit(s); No CLA students Credit will not be granted if credit has been received for: PSTL 1367W; Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Hodne,Barbara Downs
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 Stories of Social Change: Global Perspectives
3 credit(s); No CLA students Credit will not be granted if credit has been received for: PSTL 1367W; Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Buturian,Linda J
Description: In PsTL1368, "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%
PsTL 1368 Stories of Social Change: Global Perspectives
3 credit(s); No CLA students w/ 60+ credits
Credit will not be granted if credit received for: PSTL 1367W; Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Harrison, K.C.
Description: "Literatures of the Islamic World" This course explores the diverse array of prose, poetry, and drama produced by Muslims across a wide geographical and historical range. We begin with the questions "What is Islam?" and "What is the Islamic World?" reading from the Qur'an and work of Islamic scholars. We read medieval lyric poetry and stories from The Thousand and One Nights in addition to contemporary poetry and short stories from Syria, Egypt, and Pakistan. We will consider common threads through ancient and modern writing, as well as the changes reflective of more recent political dynamics such as postcolonialism. Our final readings examine the experiences of Muslim Americans post-9/11, inviting students to compare the rich vision of the Islamic World gained through the course to portrayals by U.S. media and law enforcement. In this course you will develop skills of literary analysis and interpretation, enhance your spoken and written communication, and engage with diverse perspectives. Expect to participate in an active classroom; classes rely on student discussion and group activities. Grading is based on reading quizzes and exams, Moodle forum participation, short writing assignments, presentation and participation.

PsTL 1371 Reading Short Stories
3 credit(s); Meets CLE req of Literature
Instructor: Rojas Collins, Molly 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 policies, including fee and financial aid restrictions. Current short story format from diverse communities within North America, Africa, the Caribbean, and Europe. Emphasizes written literature inspired by oral "storytelling," storytelling as "theatre," and storytelling as communal endeavor.
Style: 100% Web Based.
Grading: See attached syllabus
Exam Format: Take-home final exam

PsTL 1461 Multicultural Perspectives in Public Speaking
3 credit(s); No CLA students w/ 60+ credits
Credit will not be granted if credit received for: COMM 1101, COMM 1101H, GC 1461 Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Trites, Jill K
Description: The purpose of this course is to introduce the student to the field of Speech Communication; to show basic theories of communication, examining and analyzing the complicated process that is communication; and demonstrating that, through conscious choices, the student can significantly impact the effectiveness of communication. This course meets the CLE theme of Civic Life and Ethics, so the framework of the class will be analyzing communication from an ethical perspective. Students will be presenting several individual speeches (personal narrative, career speech, speech of belief, informative speech) and a group persuasive speech. All formal speeches will be recorded so that students can review their presentations. The required textbook is a free, open web-based book, so students do not have to purchase a regular textbook at the bookstore. Students will need to have daily access to the Internet (UM computer labs are great) to utilize the various technologies we will utilize in the course, including Presi, VideoANT, and Moodle.
Style: 20% Lecture, 20% Discussion, 10% Small Group Activities, 45% Student Presentation, 5% Web Based.
Grading: 20% quizzes, 15% written homework, 55% in-class presentation, 10% class participation.
Exam Format: Students have choice of taking the quizzes in two formats: (A) multiple-choice and true/false, or (B) essay.
Instructor: Frederickson, Tina  
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 & civic obligations we have as a speaker and listener. * Please note - Sections 4 & 5 are part of a Learning Community with PsTL 1131. You must be a CEHD 1st year student to enroll in these two sections this semester. The focus will be on Environmental/Sustainability Issues as a point of general conversation, research, and two major speeches. No prior knowledge is required.  
Style: 10% Lecture, 5% Film/Video, 15% Discussion, 20% Small Group Activities, 45% Student Presentation, 5% Web Based.  
Grading: 20% final exam, 18% written homework, 7% attendance, 50% in-class presentation, 5% class participation.

PsTL 1461 Multicultural Perspectives in Public Speaking  
3 credit(s);No CLA students w/ 60+ credits credit will not be granted if credit received for: COMM 1101, COMM 1101H, GC 1461  
Credit will not be granted if credit has been received for: WRIT 1223;Meets CLE req of Civic Life and Ethics  
Instructor: Mitchell, Tania D.  
Description: Students develop fundamental skills, knowledge, and abilities to confidently communicate their thoughts and ideas to others in a public forum. Students prepare and present a series of informative and persuasive speeches on socially significant topics in multicultural contexts. Because public speaking is a skill that requires practice, students will have the opportunity to give a variety of speeches throughout the semester. Students will review their speeches via video recording. Both speaking and reviewing of speeches is designed in a way to help students overcome fear of public speaking. Special focus on ethics, citizenship, voice, language.  
Style: 15% Lecture, 5% Film/Video, 20% Discussion, 20% Small Group Activities, 40% Student Presentation.  
Grading: 10% reports/papers, 10% attendance, 70% in-class presentation, 10% class participation.

PsTL 1485 Creativity: Photography  
4 credit(s); Own camera [35 mm w/adjustable controls preferred], UC; $50 lab fee  
Credit will not be granted if credit has been received for: UC 1485;  
Instructor: Millikan, Jeffrey B.  
Description: Conceptual, technical, and historical aspects of photography as art. Hands-on experience with camera control, film development, enlarging, and printing in black-and-white. Individual/group critiques of student portfolios. Lab.

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: Student may contact the instructor or department for information.

PsTL 1525V 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 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,
PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Rojas Collins, Molly C
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: 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 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 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: Hsu, Leon
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: 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: 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 koyaaniqsatsi (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: 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
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 course 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 United 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

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Rojas Collins, Molly C
Description: All of our actions, whether deliberate and carefully considered or reactive and unconscious, have consequences and effects. In this course, we are interested in understanding the ways our actions can make important differences. We will question whether the individual is always the agent for change, or whether the context that surrounds the individual helps or hinders social action. The instructors will bring their backgrounds in law, writing, literature, American studies, and working with multilingual students to examine how experiences and stories are represented in art, literature, legal cases, and film. Student work will culminate in a multi-media capstone project that invites them to document a person or community that is making a difference.

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 affects 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: Rojas Collins, Molly C
Description: In the first half of the course we will explore how 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 coexist? 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: Trites, Jill K
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 may contact the instructor or department for information.

PsTL 1993 Directed Study
1-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Poch, Robert Karl
Description: Student may contact the instructor or department for information.

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 3324W Writing in the Workplace for Education and Human Development Majors
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Hodne, Barbara Downs
PsTL 3325V Honors: Project-Based Writing For Education and Human Development Majors
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Peter, Gary E
Description: Designed for those CEHD learners who seek to fulfill the upper level writing intensive requirement in a way that is relevant to their major and field of study, this course will support you as you manage a larger writing project. Learners in this course will form a community of writers, as each grapples with the challenges of a major project focusing on a meaningful problem or issue in your field of study. Some of the most important and most challenging work you face as you near graduation in your major is the work of bringing your academic training to bear on current issues in your field of study. By focusing on project-based writing, this course supports undergraduate learners in the endeavor to delve into and contribute to the work being done in your field to address a particular problem. You will propose a project, identify an audience, tailor your work to address your audience’s needs, gather relevant information through primary and secondary research, and create a product that engages others and furthers the real-world work of solving problems. Collaborative activities and assignments will support you through the process.
Style: 10% Lecture, 40% Discussion, 40% Small Group Activities, 10% Student Presentation.
Grading: 45% reports/papers, 30% special projects, 10% reflection paper, 5% in-class presentation, 10% class participation.

PsTL 3325W Project-Based Writing For Education and Human Development Majors
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Peter, Gary E
Description: Designed for those CEHD learners who seek to fulfill the upper level writing intensive requirement in a way that is relevant to their major and field of study, this course will support you as you manage a larger writing project. Learners in this course will form a community of writers, as each grapples with the challenges of a major project focusing on a meaningful problem or issue in your field of study. Some of the most important and most challenging work you face as you near graduation in your major is the work of bringing your academic training to bear on current issues in your field of study. By focusing on project-based writing, this course supports undergraduate learners in the endeavor to delve into and contribute to the work being done in your field to address a particular problem. You will propose a project, identify an audience, tailor your work to address your audience’s needs, gather relevant information through primary and secondary research, and create a product that engages others and furthers the real-world work of solving problems. Collaborative activities and assignments will support you through the process.
Style: 10% Lecture, 40% Discussion, 40% Small Group Activities, 10% Student Presentation.
Grading: 45% reports/papers, 30% special projects, 10% reflection paper, 5% in-class presentation, 10% class participation.

PsTL 5105 Increasing Access and Success in Undergraduate Classrooms
A-F only, 3 credit(s);
Instructor: Duranczyk, 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.
Style: 50% Discussion, 20% Small Group Activities, 30% Student Presentation.
Grading: 50% reports/papers, 30% in-class presentation, 20% class participation.
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 8010 Special Topics: Postsecondary Teaching and Learning
3 credit(s), max credits 6;
Instructor: Mitchell, Tania D.
Description: This course focuses on understanding the history, theory and practice of service-learning. Key concepts addressed in this class include: responsive community partnerships, the meaning of service, power and positionality in community-based learning, the role of reflection, critical pedagogy, social justice, civic learning, and experience design. This class will locate itself in the national (and growing international) context of service-learning and civic engagement as a field. Specific course objectives are: >> To understand the theoretical roots and various approaches to service learning and experiential education pedagogy >> To develop knowledge and skills for designing effective service-learning experiences >> To develop an understanding of reciprocal relations between service and learning >> To develop an understanding of responsive service-learning partnerships and best practices >> To trouble the notion of service, exploring the intersections of privilege and community service >> To develop knowledge and skills for providing and obtaining methods for reflecting on service >> To become familiar with empirical research in service-learning, focusing on outcomes for student learning as well as student and community development.
Style: 30% Lecture, 40% Discussion, 20% Small Group Activities, 10% Student Presentation.
Grading: 80% reports/papers, 10% journal, 10% class participation.

PsTL 8296 Supervised Internship in Postsecondary Teaching and Learning
S-N only, 3-6 credit(s), max credits 6;
Instructor: Grier-Reed, Tabitha LaShaun
Description: Student may contact the instructor or department for information.

PsTL 8315 Plan B Capstone Seminar
S-N only, 3 credit(s);
Instructor: Wambach, Cathrine A
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: Reynolds, Arthur J.
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: This is an introduction to a variety of creativity and idea generation tools with an emphasis on innovative product concept development. Each week during lecture, students learn a toolset and apply it to an ongoing project. Work is documented on a blog and in a notebook. This is a half-semester class. It meets during the second 7 weeks. Throughout the 7 weeks, students will be visiting, touring and participating in creative activities with companies in the Twin Cities. Each week, students will meet at a different site for one of the lectures to engage in a real world activity related to the material discussed in class. This class is required for the product design minors.
Style: 30% Lecture, 20% Small Group Activities, 50% Field Trips.
Grading: 70% written homework, 10% journal, 10% class participation, 10% other evaluation. There are 7 blog assignments that are equally weighted, one for each week of the class. The assignments will build on each other and are all based on an overarching project theme.
Exam Format: no exams

PDes 3702 Concept Sketching and Rendering
A-F only, 2 credit(s);
Instructor: Kudrowitz, Barry
Description: This class is an introduction to sketching for communication of conceptual product ideas. It is a seven-week course during the first half of the semester. There are no pre-requisites and you do not need to know how to draw to take
this class. Emphasis is placed on free-hand 2-point perspective. Each week during lecture, students learn a different toolset and apply it to weekly drawing assignments.

**Style:** 50% Demonstration, 50% Studio.
**Grading:** 70% written homework, 30% class participation.

**PDes 3703 Product Form and Model Making**
- A-F only, 4 credit(s);
- **Instructor:** Sheber, Sarah
- **Description:** Student may contact the instructor or department for information.

**PDes 4193 Directed Study in Product Design**
- A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Kudrowitz, Barry
- **Description:** Student may contact the instructor or department for information.

**PDes 5193 Directed Study in Product Design**
- A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Kudrowitz, Barry
- **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:** This is an introduction to a variety of creativity and idea generation tools with an emphasis on innovative product concept development. Each week during lecture, students learn a toolset and apply it to an ongoing project. Work is documented on a blog and in a notebook. This is a half semester class. It meets during the second 7 weeks. Throughout the 7 weeks, students will be visiting, touring and participating in creative activities with companies in the Twin Cities. Each week, students will meet at a different site for one of the lectures to engage in a real world activity related to the material discussed in class. This class is required for the product design minors.
  - **Style:** 30% Lecture, 20% Small Group Activities, 50% Field Trips.
  - **Grading:** 70% written homework, 10% journal, 10% class participation, 10% other evaluation. There are 7 blog assignments that are equally weighted, one for each week of the class. The assignments will build on each other and are all based on an overarching project theme.
  - **Exam Format:** no exams

**PDes 5702 Concept Sketching and Rendering**
- A-F only, 2 credit(s);
- **Instructor:** Kudrowitz, Barry
- **Description:** This class is an introduction to sketching for communication of conceptual product ideas. It is a seven-week course during the first half of the semester. There are no pre-requisites and you do not need to know how to draw to take this class. Emphasis is placed on free-hand 2-point perspective. Each week during lecture, students learn a different toolset and apply it to weekly drawing assignments.
  - **Style:** 50% Demonstration, 50% Studio.
  - **Grading:** 70% written homework, 30% class participation.

**PDes 5703 Product Form and Model Making**
- A-F only, 4 credit(s);
- **Instructor:** Sheber, Sarah
- **Description:** Student may contact the instructor or department for information.

**PDes 8192 Readings in Product Design**
- A-F only, 1-3 credit(s), max credits 6;
- **Instructor:** Kudrowitz, Barry
- **Description:** Student may contact the instructor or department for information.

**PDes 8193 Directed Study in Product Design**
- A-F only, 1-4 credit(s), max credits 8;
- **Instructor:** Kudrowitz, Barry
- **Description:** Student may contact the instructor or department for information.
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.

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: See attached syllabus
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: Wlaschin, Jhon Thomas
Description: Student may contact the instructor or department for information.

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: Luciana, Monica Marie
Psy 1001H Honors Introduction to Psychology
A-F only, 4 credit(s); Honors
Credit will not be granted if credit has been received for: PSTL 1281; Meets CLE req of Social Sciences
Instructor: Kling, Kristen C
Description: Student may contact the instructor or department for information.

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 Experiences
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: Introduction to Evolutionary Psychology
A-F only, 3 credit(s), max credits 6;
Instructor: Myers, John Eldon
Description: Student may contact the instructor or department for information.

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 1905 Freshman Seminar: Consciousness
A-F only, 3 credit(s), max credits 6;
Instructor: Van Meurs, Brian Gregory
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 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. 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.

**Style:** Online

**Grading:** See attached syllabus

### Psy 3031 Introduction to Sensation and Perception

- **3 credit(s);**
- **Instructor:** Mesik, Juraj
- **Description:** Student may contact the instructor or department for information.

### 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 or NSci 1100
- **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 or NSci 1100
- **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:** See attached syllabus

### 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, [3801 or equiv]] or instr consent Credit will not be granted if credit has been received for: PSY 5135;
Instructor: Clark, Rachel A
Description: This course will introduce students to the study of individual differences in psychology, covering concepts and research on the topics of intelligence, personality, social attitudes, and vocational interests. It will include discussion of: 1) research methods and measurement of differences, 2) structure and distribution of the traits we use to describe individuals (including group differences), 3) what is known about the cause of differences (nature vs. nurture?), 4) why we care about differences (i.e., the associated outcome variables and applications of this knowledge), and 5) how we might understand individual differences in an evolutionary sense.

Psy 3201 Introduction to Social Psychology
3 credit(s);
Instructor: Allen, Jill M
Description: Student may contact the instructor or department for information.

Psy 3206 Introduction to Health Psychology
3 credit(s);
Instructor: Maki, Alex Ryan
Description: Student may contact the instructor or department for information.

Psy 3301 Introduction to Cultural Psychology
A-F only, 3 credit(s);
Instructor: Lee, Joyce
Description: Student may contact the instructor or department for information.

Psy 3511 Introduction to Counseling Psychology
3 credit(s);
Instructor: Jordan, Kelly M
Description: Student may contact the instructor or department for information.

Psy 3511 Introduction to Counseling Psychology
3 credit(s);
Instructor: Greer, Christian Sean
Description: Student may contact the instructor or department for information.

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); 1001 Credit will not be granted if credit has been received for: PSY 5604H;
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: See attached syllabus

Psy 3604 Introduction to Abnormal Psychology
3 credit(s); 1001 Credit will not be granted if credit has been received for: PSY 5604H;
Instructor: Klimes-Dougan, Bonnie
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 3604 Introduction to Abnormal Psychology
3 credit(s); 1001 Credit will not be granted if credit has been received for: PSY 5604H;
Instructor: Poppe, Andrew B
Description: Student may contact the instructor or department for information.

Psy 3604 Introduction to Abnormal Psychology
3 credit(s); 1001 Credit will not be granted if credit has been received for: PSY 5604H;
Instructor: Lissek, Shmuel
Description: Student may contact the instructor or department for information.

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 3633 Happiness: Integrating Research Across Psychological Sciences
3 credit(s);
Instructor: MacDonald III, Angus
Description: What is the nature of human happiness and fulfillment? To answer this, we will build on insights from many disciplines, including cognitive, personality and social psychology, biology and even economics. The course approaches happiness from multiple levels of analysis to build an integrative approach to the feelings that make life worth living. The course will cover the measurement of happiness, preference and utility (economic approaches), flow and states that give rise to happiness (social psychology), adaptation (personality and behavioral genetics), pleasure centers in the brain (neuroscience), addiction and depression (clinical psychology). Students will (1) Learn the constituent properties of happiness, in terms of both basic mechanisms and individual differences (2) Conceptualize everyday, relevant and ancient questions in terms of objective evidence and experiment methodologies (3) Learn to scrutinize popular and scholarly articles from diverse fields in terms of soundness of the assumptions and strength of data (4) Practice drawing together a coherent argument from diverse sources, and balance evidence appropriately. Style: 50% Lecture, 20% Discussion, 10% Small Group Activities, 20% Student Presentation.
Grading: 40% reports/papers, 12% special projects, 12% quizzes, 12% reflection paper, 12% in-class presentation, 12% class participation. Students will read texts describing research in the area; make in-class presentations based on the readings; report on a personal experiment; and participate in class discussion. Evaluation of student performance will be based on class presentations.

Psy 3666 Human Sexuality
3 credit(s);
Instructor: Althaus, Linde
Description: Student may contact the instructor or department for information.

Psy 3711 Psychology in the Workplace
3 credit(s);
Instructor: Kuncel, Nathan Richard
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:** Stellmack, Mark A

**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 3960 Undergraduate Seminar in Psychology**

1-5 credit(s), max credits 45, 9 completions allowed;

**Instructor:** Overmier, J. Bruce

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

**Psy 4011 Applied Behavior Analysis**

3 credit(s);

**Instructor:** Larsson, Eric V.

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

**Psy 4032 Psychology of Music**

3 credit(s);

**Instructor:** Oxenham, Andrew J.

**Description:** The two main aims of the course are: 1) To provide a general overview of some fundamental concepts in the perception and production of sound and music; 2) To provide an in-depth study of a few selected topics within music psychology, drawing on recent primary research literature. The course is built around a combination of lectures, providing the necessary background information, and student-led seminars, in which papers from the literature are discussed. Lecture topics include: Introduction to sound, introduction to hearing, masking and the principles of MP3 coding, categorical perception in music, scales, consonance and dissonance in harmony, melody perception and memory, and the perceptual organization of sound and music. Seminars are based around themes, which this year will include: tonality and rhythm, cognitive neuroscience of music, comparative and developmental studies of music perception, musical expertise and the bases of talent. Each student will lead the discussion of one published research paper in class.

**Grading:** 40% final exam, 20% reports/papers, 15% quizzes, 10% written homework, 10% in-class presentation, 5% class participation.

**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
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 5031W Perception
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Legge, Gordon Ernest
Description: This course introduces students to known principles and contemporary theories of visual perception. The main topics include: light and vision, image formation in the eye, sensory coding of patterns, color vision, depth perception, object recognition, and impaired vision. The course is meant for advanced undergrads and grad students. Majors from many areas will find this course interesting, including psychology, biology, neuroscience, computer science, engineering, art, and design. Because this is a writing-intensive course (WI), some class time will be devoted to discussion of scientific writing. There will be an important focus on preparation of the term paper. For more information, see class website at http://vision.psych.umn.edu/~gellab/5031.
Style: 75% Lecture, 25% Discussion. Students will adopt and present an illusion in class.
Grading: 25% mid exam, 25% final exam, 30% reports/papers, 5% special projects, 5% problem solving, 10% other evaluation. Miscellaneous assignments.
Exam Format: essay, short answers and one problem to solve

Psy 5036W Computational Vision
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kersten, Daniel John
Description: One of the great mysteries of psychology and brain science is how the human visual system determines what and where objects are just by looking. This is the problem of vision. The perception of what is out there in the world is accomplished continually, instantaneously and usually without conscious thought. The very effortlessness of perception disguises the underlying difficulty of the problem. Vision is important because it is one of the principle routes to our acquisition of knowledge, as well as a guide to its utilization. The study of vision has attracted researchers from many disciplines outside of psychology, including computer science, mathematics, physics, engineering, and neuroscience. This class takes a multi-disciplinary approach to vision, combining lectures and interactive computer programming exercises to learn how the visual system functions. Prerequisites: Experience with calculus, linear algebra and programming is useful. Text: Wandell, B. A. (1995). Foundations of Vision. Sunderland, Massachusetts: Sinauer. The programming assignments will use the Mathematica programming environment. No prior experience with Mathematica is necessary.
Grading: There will be a mid-term, final examination, programming assignments, as well as a final project. Weighting: Homework/programming : 28% , Mid-term examination 16%, Final examination: 16% Final project : 40% (three parts: 2%+5%+33%)

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: Mc Gue, 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 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 5707 Personnel Psychology
4 credit(s); [3001W or equiv], 3711 or instructor consent credit will not be granted if credit received for: 5701, 5703 Credit will not be granted if credit has been received for: PSY 5701;
Instructor: Ones, Deniz S
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: Intermediate R Programming
3 credit(s), max credits 8;
Instructor: Grove, William Merrill
Description: Student may contact the instructor or department for information.
Psy 5960 Topics in Psychology: Attention and Autism  
3 credit(s), max credits 8;  
Instructor: Jiang,Yuhong Vanessa  
Description: Student may contact the instructor or department for information.

Psy 5960 Topics in Psychology: Environmental Decision Making: Food Systems Focus  
3 credit(s), max credits 8;  
Instructor: Cadieux,Kirsten Valentine  
Description: How do people comprehend, shape, and manage food environments? How do people decide which dynamics of food controversies are important – and worthy of study and activism? How do scholars identify and apply appropriate analytic frameworks to illuminate the intertwined nature of social and environmental systems? This research seminar uses a platform of interdisciplinary environmental psychology and other social science approaches to explore ways that people experience environments and make decisions about them, both as individuals and also in the social contexts where environmental decision making is institutionalized. Choosing a project appropriate to their interests and skills, students will develop, research, and engage salient public audiences in exploring questions about everyday experience in environments, particularly environments relevant to food systems (although participants with broader environmental interests are also welcome). We will use case studies at different scales to explore a range of environmental decision challenges from the everyday experience of our immediate environments to the distant, abstract, global environment writ large, for example, in the need to address climate change and changing demands for food in processes for governing environments. Projects planned for the class relate to food system decision making in local projects (such as: a student-driven project to evaluate the values embodied in University Dining Services procurement strategies; an NGO-organized project to negotiate and institutionalize a comprehensive set of food justice principles; and a state-wide project organized in collaboration with Cooperative Extension to develop community food networks), and will also include other student interests and projects students bring to or develop in class. This course will meet in conjunction with cross-food-system events planned by the 2013-2014 Institute for Advanced Study Agri-Food Collaborative, focused on building capacity to discuss difficult topics across disparate perspectives on the food system, and on building knowledge infrastructure for representing these discussions in different ways. Engaging with environmental decision projects underway around the university and state, students will have the opportunity to consider the challenges involved in using diverse knowledge systems to understand and manage socio-environmental dynamics.  
Style: 10% Lecture, 25% Discussion, 35% Small Group Activities, 20% Student Presentation, 10% Field Trips.  
Grading: 35% reports/papers, 21% special projects, 24% reflection paper, 20% class participation. DETAILS: 24%: 8 response essays; 21%: 3 community engagement exercises; 20%: participation (including some class facilitation); 35%: Term project in 4 stages: (proposal 5%, source summary 10%, presentation 10%, project report 10%)

Psy 5993 Research Laboratory in Psychology  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Brothen,Thomas  
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: 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: Kersten,Daniel 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: 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: Simpson,Jeffry 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: 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-Ida 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: 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: 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: Allen, Jill M
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 J.
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;
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 8041 Proseminar in Perception
A-F only, 3 credit(s);
Instructor: Kersten, Daniel John
Description: Student may contact the instructor or department for information.

Psy 8111 Psychopathology I
A-F only, 4 credit(s);
Instructor: Vachon, David
Description: Student may contact the instructor or department for information.

Psy 8201 Social Cognition
A-F only, 3 credit(s);
Instructor: Borgida, Eugene
Description: Student may contact the instructor or department for information.

Psy 8203 Impression Management
3 credit(s);
Instructor: Gonzales, Marti Hope
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: Simpson, Jeffry A
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: Miller, Joanne Marie
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 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 8611 Assessment I
A-F only, 5 credit(s);
Instructor: Fuhrman, Michael Jed
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 8703 Seminar in Industrial and Organizational Psychology III
A-F only, 3 credit(s);
Instructor: Ones, Deniz S
Description: Student may contact the instructor or department for information.

Psy 8814 Analysis of Psychological Data
4 credit(s);
Instructor: Wang, Chun
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.

Psy 8960 Graduate Seminar in Psychology
1-4 credit(s), max credits 36, 9 completions allowed;
Instructor: Ones, Deniz S
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: Lee, Richard M
Description: Student may contact the instructor or department for information.

Public Affairs 225 HHHCtr

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: Thayer, Ellen R
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: 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. to 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:** Bandy, Jack Todd
- **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:** 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:** 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, Katherine 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.

**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:** Bergner, Rebecca Beatrice
- **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:** Cottledge, Anitra D
- **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:** Taylor Jr, Leonard
- **Description:** Student may contact the instructor or department for information.
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.

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: Brito, Marisol
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: Skrebes, Robyn Jane
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. 7:30 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 though 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: Stafford, Jeff
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: Harris, Margaret McKenny
Description: Student may contact the instructor or department for information.

PA 3002 Basic Methods of Policy Analysis
A-F only, 3 credit(s); Meets CLE req of Social Sciences
Instructor: Gunyou, John
Description: This is an introductory course in policy analysis, with case studies and real-world exercises designed to equip students 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 prepare and equip future leaders with the theoretical policy foundations, practical methods and analytical techniques they need to be successful in their careers. Students are introduced to a multidisciplinary approach to problem solving, with team-based lessons drawing on basic social science theories and methodologies that reflect the traditions and value of a liberal education. 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 issues as sports stadiums, teenage driving, 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
PA 3003 Nonprofit and Public Financial Management  
A-F only, 3 credit(s);  
Instructor: Gunyou, John  
Description: This course is designed to equip current and future nonprofit and public managers with the practical financial management tools and analytical techniques they need to be successful in their careers. Course work is very applications oriented, with case studies and real-world exercises used to provide managers with the basic concepts and collaborative methods they need for team project and budget planning, program analysis, interpreting financial reports, identifying and resolving organizational performance issues. A technology-facilitated, flexible learning model is used to provide students with the hands-on participatory tools they need to compete in the new economy. Students are provided access to convenient online tutorials that may be completed at their convenience. Class time is dedicated to direct interaction with the instructor, as students apply those lessons by solving practical case studies in a small team setting. Notes from former students: Over the weekend I received the Annual Report for a non-profit I’ve been working with for the past few years. I’m proud to say I was actually able to look at the financial statements, and gain a significant amount of knowledge about the organization. I appreciate that I am actually transferring the information I learned to my daily life. This was truly one of my most enjoyable classes this year! I took your non-profit budgeting class, and it convinced me to look into the non-profit sector for career options. I was working on a grant recently, and pulled out some of my budgets from class to help me format them properly. I just wanted to say thanks for teaching me very helpful budgeting tips that I’ve already put to good use at work!  
Style: 10% Lecture, 30% Discussion, 50% Small Group Activities, 10% Student Presentation. Monday lectures are optional for students who complete online lessons and feel they understand the material. Wednesday attendance is required, where students collaboratively solve ungraded case studies. Individually graded homework is due on Friday.  
Grading: 15% mid exam, 20% final exam, 20% special projects, 30% written homework, 15% class participation. Participation points are determined by attendance at Wednesday classes, where students collaboratively complete ungraded case studies during class, working in small teams.  
Exam Format: The midterm and final exams involve analysis of actual budgets and financial reports, with problems similar to the graded assignments. Students are permitted to use one page of whatever notes and formulas they wish to bring for the exams.

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: Fredrickson, Brian Steven  
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: Marcy, Ben  
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: Stafford, Jeff  
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: Ve Lure Roholt, Christine Elizabeth  
Description: Core leadership course information applied to leadership situations. Settings include community or educational organizations, corporations, University student organizations, and formal internships. Students identify two leadership objectives from among personal, interpersonal, and organizational development. Experiential learning, individual presentations, group discussions, critical reflection/writing.

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 3302C
Credit will not be granted if credit has been received for: OLPD 3306;
Instructor: Burgum, Benjamin
Description: Student may contact the instructor or department for information.

PA 3972 Leadership Minor: Field Experience
A-F only, 3 credit(s); PA 3961 or 3961W or EDPA 3302 or EDPA 3302W or OLPD 3302C
Credit will not be granted if credit has been received for: OLPD 3306;
Instructor: Marcy, Ben
Description: Student may contact the instructor or department for information.

PA 3990 General Topics in Public Policy: Minnesota History
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Stone, Paul Clois
Description:

PA 4101 Nonprofit Management and Governance
3 credit(s);
Instructor: Rojas, Allison Langell
Description:

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: This course gives you the opportunity to combine your business education with your passion for social good. In this class you will transform your idea or help another transform their idea into a viable business plan. While the nonprofit model is the most well known model of social entrepreneurship, new practice and research shows that companies can make money and attack social ills as well. Each project will have a business mentor who will critique and provide guidance in the development of the business plan. While there is structure to the class, the class strives to simulate what you would have to do in the “real world” to transform an idea into a living, breathing organization. If you want to put your book learning to good use, want to start improving the world, have an idea you want to turn into a viable social venture and enjoy overcoming challenges, then this is the course for you.
Style: 20% Lecture, 60% Small Group Activities, 10% Guest Speakers, 10% Web Based. Approximately 3-4 classes will be run as "flipped classrooms". This means students will do readings and watch lectures online while what would be considered homework will be done in class
Grading: 60% reports/papers, 30% quizzes, 10% other evaluation.

PA 4200 Urban and Regional Planning
3 credit(s);
Instructor: Douma, Frank P
Description: This course is geared toward upper division undergraduates 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, 25% Discussion, 5% Small Group Activities, 20% Guest Speakers, 10% Service Learning.
Grading: 20% mid exam, 25% final exam, 15% reports/papers, 10% special projects, 20% written homework, 10% class participation.
Exam Format: In class: multiple choice, short answer and essay

PA 4490 Topics in Social Policy: Community Organizing for Effective Public Policy
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: Nobbe, June Elly
Description: Student may contact the instructor or department for information.

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 4971 Directed Study, Leadership Minor
OPT No Aud, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Werner, Linnette
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: Process of public policy analysis from problem structuring to communication of findings. Commonly used analytical methods. Alternative models of analytical problem resolution.

PA 5002 Introduction to Policy Analysis
A-F only, 1.5 credit(s);
Instructor: Wilson, Elizabeth Joan
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 5002 Introduction to Policy Analysis
A-F only, 1.5 credit(s);
Instructor: Lindsey, Greg H
Description:

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 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 5003 Introduction to Financial Analysis and Management  
**A-F only, 1.5 credit(s);**  
**Instructor:** Zhao, Zhirong Jerry  
**Description:** Basic finance/accounting concepts/tools used in public/nonprofit organizations. Fund accounting, balance sheet and income statement analysis, cash flow analysis, and public/nonprofit sector budgeting processes. Lectures, discussions. Cases/examples from nonprofit and public sector organizations.

PA 5004 Introduction to Planning  
**A-F only, 3 credit(s);**  
**Instructor:** Allen, Ryan Patrick  
**Description:** History, institutional development of urban planning as a profession. Intellectual foundations, planning theory. Roles of urban planners in U.S./international settings. Scope, legitimacy, limitations of planning and of planning process. Issues in planning ethics and in planning in settings of diverse populations/stakeholders.

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 5012 The Politics of Public Affairs  
**A-F only, 3 credit(s);**  
**Instructor:** Soss, Joe  
**Description:** Stages of policy making from agenda setting to implementation. Role/behavior of political institutions (courts, legislatures, executives, bureaucracies) and citizens, social movements, and interest groups. Concepts of political philosophy. Theories of the state. Team taught, interdisciplinary course. Small discussion sections.

PA 5013 Law and Urban Land Use  
**A-F only, 1.5 credit(s);**
**OVERVIEW:** How do material and energy flows shape development of a sustainable society? Material-Energy Flows will be discussed in the context of: A) Resource depletion and recycling, B) Economic development, and, C) As a source of environmental pollution. Students will learn skills of direct material-energy flow analysis (MEFA), life cycle assessment (LCA), the combination of MEFA and LCA for environmental footprint-ing, economic input-output analysis, and cost benefit analysis for resource extractions/recycling decisions as well as pollution abatement decisions. The first half of the course will focus on general principles and methods. In the second half, students will work on group projects, handling real-world data to develop environmental footprints of different units of society: 1. Production Systems ? businesses or industries 2. Infrastructure systems (energy supply, water supply); 3. Consumers (households) 4. Different Regions: National, State and Metropolitan/ City scales WEEKLY PLAN: Week 1 - Overview of Material-Energy Flows in Society: Global resources, renewable and non-renewable, Units and Conversions, Issues of material scarcity and interdependence of water-energy and materials Week 2: Material-Energy Flows in Different Units of Society: Producers (Industry and Businesses), Infrastructure (water supply, energy supply, transportation systems, etc.), Consumers (households), and Regions (nations, cities, metropolitan areas). Issues of resource scarcity and environmental pollution, and their relationship with sustainability. Week 3-4: General Principles/Methods:MEFA at different scales; MEFA and the Economy, Introduction to Economic Input Output tables. Week 5-6: General Principles & Methods: Life Cycle Assessment (LCA), Combining MEFA with LCA to develop resource use and pollution emission footprints Week 7-8: General Principles & Methods: Cost-Benefit Analysis for decisions about resource extraction, recycling and environmental pollution abatement Week 9-11: Material-Energy Use and Sustainability of Production Systems- Economic Aspects - Technical and economic feasibility of resource extraction and recycling, Cost-benefit analysis and decision-making Environmental Performance of products, industries and infrastructure services Examples of the mining industry, water or energy infrastructure, fisheries and recycling systems. Week 11: Material-Energy Flows and Sustainability of Consumers - focus on households, quality of life and sufficiency Week 12-14: Material-Energy Flows and Regional Sustainability - We will study the economy (GDP, job creation), resource use, and pollution footprints of cities, states and the US economy. Week 15: Final Presentation
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: 20% final exam, 25% reports/papers, 45% quizzes, 10% class participation. Grading percentages are approximate. Class participation includes group preparation and participation.
Exam Format: Written, in-class.

PA 5038 Analytics for Leaders I
A-F only, 3 credit(s);
Instructor: Le, Thanh Trung
Description:

PA 5041 Qualitative Methods for Policy Analysts
A-F only, 4 credit(s);
Instructor: Saunoi-Sandgren, Emily O
Description: Please note that the assignments, readings, and class session topics will be revised slightly for the Spring 2013 offering of PA 5041. Emily Saunoi-Sandgren's background includes advocacy, nonprofit management, and policy issues affecting women and children. She has a master's degree in public policy with a minor in population studies from the University of Minnesota and she earned her bachelor's degree in psychology, French, and women's studies from St. Olaf College. She has taught PA 5041: Qualitative Methods for Policy Analysts since its creation in Fall 2009.

PA 5051 Cohort Leadership I
A-F only, 2 credit(s);
Instructor: Zentner Bacig, Karen
Description:

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:

PA 5080 Capstone Preparation Workshop
S-N only, 1 credit(s);
PA 5081 Working in Teams: Crossing Disciplines and Learning from Difference  
S-N only, 0 credit(s);  
Instructor: Bloomberg, Laura L  
Description: "We will not solve our biggest societal challenges by working in silos. The future will require leaders who understand the need to work across disciplines, across cultures, and across ideological boundaries to craft solutions together." At the Humphrey School we believe in the value of teams and learning from differences among colleagues. Because of this, students have multiple opportunities to work in teams both inside and outside of classes. We offer PA 5180 Working in Teams: Crossing Disciplines and Learning from Difference as a zero-credit, reduced fee course for all incoming Humphrey students because we want students to be well prepared to lead, participate, manage, learn from, and thrive in these experiences. This active and engaging class will provide participants with principles and skills necessary to thrive in high-performing multi-disciplinary and multi-cultural teams.  
Style: 20% Lecture, 40% Discussion, 40% Small Group Activities.

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 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 5105 Integrative Leadership Seminar  
OPT No Aud, 3 credit(s); Grad student or instr consent  
Credit will not be granted if credit has been received for: MGMT 6402;  
Instructor: White, Katie Marie  
Description: This is an interdisciplinary, 3-credit seminar led by co-instructors from multiple schools of the university. Students will: a) learn to recognize and diagnose integrative leadership challenges and opportunities; b) build their own capacities to practice integrative leadership through group work in individualized peer-to-peer coaching in diverse teams and through being exposed to a range of boundary work practices; and c) gain better knowledge of the leadership contexts within their own profession and in other sectors. We emphasize contexts for integrative leadership at five basic levels: within individuals, within and across groups, within and across organizations, within and across sectors, and at the societal scale. Learning occurs through reading foundational materials, personal leadership coaching, engaging extensively with examples from guest speakers and case materials, developing a group capstone project on integrative leadership, and iteratively co-producing an understanding of what integrative leadership is. This course is sponsored by four departments. If PA 5105 shows as full, please check for space under the other departments - MGMT 6402, OLPD 6402, and PubH 6702. They are all for the same class, with the same instructors, meeting at the same time. Every section in all four schools must be filled before any over-ride permission numbers are issued. If all class sections are full, please contact Merrie Benasutti at the Center for Integrative Leadership (624-8300) for a permission number.  
Style: 15% Lecture, 20% Discussion, 25% Small Group Activities, 10% Student Presentation, 15% Guest Speakers, 15% Web Based.  
Grading: 30% reports/papers, 30% reflection paper, 20% class participation, 20% other evaluation. Participation in class-based learning and discussion - 20% Biweekly reading notes and biweekly reflection notes - 30% Team case study project research, presentation, and report - 30% Integrative leadership peer-to-peer coaching: 20%

PA 5108 Boards Service Practicum  
S-N only, 1.5 credit(s);  
Instructor: Stone, Melissa M  
Description:

PA 5123 Philanthropy in America: History, Practice, and Trends  
3 credit(s);
Instructor: Barreiro, Terri Diane
Description: What impact does philanthropy have on social policy? How does philanthropy operate in the 21st century? What constraints legal constraints limit philanthropy in America? This course provides deep understanding of the theory and practice of philanthropy with a particular focus on individual and foundation giving in the United States. Drawing on the key scholarship of the field, students will learn alternative models of philanthropy, its history and development, economic structure, and power dynamics; core components of grantmaking and grantseeking; as well as key current debates and career options. This is not a fundraising or grantwriting course. The class is instead an intensive study of philanthropy and how private wealth effects social systems. Upon completion students can effectively navigate the field in their public affairs careers. This course will enable the student to analyze and understand the changing nature of private philanthropy and its relationship to public policy as well as its importance to business and society at large. Increased public and public sector demand for effectiveness, accountability and legitimacy will be reviewed along with the emerging issues and challenges facing this field. Students will be able to apply knowledge from this class to a variety of fields, including nonprofit management, fundraising, and grantmaking as well as policy analysis. Class instruction will include lectures, guest speakers, case study analyses, class discussions, small group exercises and individual assignments. The course will meet once a week in seminar format. Full class participation by all students will be expected. Reading assignments will be grouped topically in the order that they will be discussed. Students are expected to have read the assignment for each class on a weekly basis before classes meet.

Style: 25% Lecture, 35% Discussion, 15% Small Group Activities, 10% Student Presentation, 15% Guest Speakers.
Grading: 15% mid exam, 20% final exam, 35% reports/papers, 10% written homework, 10% attendance, 10% reflection paper. All assignment details will be given in class at which time the basic expectations for grades will be explained.
Exam Format: Mid exam will be a traditional exam that is a mixture of multiple choice and short essay. Final exam will be an essay exam.

PA 5180 Topics in Executive Leadership: Public Safety Leadership I
A-F only, 3 credit(s), max credits 6;
Instructor: Gerdes, Kevin Scott
Description: This Public Safety Leadership program consists of two courses: PA 5180 ? Public Safety Leadership I (Fall) and 5180 ? Public Safety Leadership II (Spring). This program will be conducted in an integrated, cohort-based format designed for mid-career working professionals with experience in the public safety disciplines of law enforcement, fire, emergency management, emergency medical services, and the military. The courses focus on particular goals relevant to a mid-career audience of public safety leaders. Learning objectives include: ? Learning about and developing executive leadership critical thinking skills in a cross-sector world. ? Gaining confidence in delivering executive leader communications in diverse settings. ? Expanding capacity for inter-disciplinary collaboration and multi-cultural competence. ? Developing reflective leadership skills to enhance ethical practice. ? Building knowledge, skills, wisdom, and motivation to formulate public safety problems, fashion effective solutions, and build necessary coalitions of support to achieve public value and advance the common good. ? Learning and developing managerial skills to employ in complex public safety organizational settings. ? Building a trusting community of praxis. Course activities will integrate guest lecturers from the public safety field, case studies, group activities, and online activities in between monthly face-to-face sessions.

PA 5190 Topics in Public and Nonprofit Leadership and Management: Managing Conflict: Negotiation
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Anderson Kelllther, 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 5211 Land Use Planning
A-F only, 3 credit(s);
Instructor: Greco, Mike
Description: For land use planners, the perennial question is how to apply land use planning to create human settlement patterns that promote sustainable, equitable, and livable outcomes in metropolitan regions, cities, and towns. This course explores this question with a focus on real-world planning processes 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. The course will help students learn how to formulate a land use plan appropriate to the community context by creating a plan for a small-size hypothetical city. Tasks to be mastered in this course include the following: 1. Describing and assessing existing and emerging community conditions 2. Formulating goals and objectives as part of a community vision statement 3. Understanding the implications of economic and population changes for land use and community services 4. Determining the suitability of land and locations for various land uses 5. Applying computer technology to specific plan-
making tasks such as map presentations, land suitability analyses, and the drawing of plans. Designing 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. Outlining implementation strategies and policies that help bring about such a future.

Style: 30% Lecture, 20% Discussion, 25% Small Group Activities, 10% Student Presentation, 15% Guest Speakers.
Grading: 65% reports/papers, 5% attendance, 5% journal, 15% in-class presentation, 10% class participation.

PA 5231 Transit Planning and Management
3 credit(s);
Instructor: Cao, Jason

PA 5232 Transportation Policy, Planning, and Deployment
4 credit(s); Sr or grad student or instr consent Credit will not be granted if credit has been received for: CE 5212;
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
A-F only, 3 credit(s);
Instructor: Bryson, John M
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 5253 Designing Planning and Participation Processes
A-F only, 3 credit(s);
Instructor: Slotterback, Carissa Schively
Description:

PA 5251 Geographic Information Systems: Applications in Planning and Policy Analysis
3 credit(s);
Instructor: Hankey, Steve

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 5290 Topics in Planning: Design for Sustainable Development: Innovate**
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Rose,Fred Anthony
Description:

**PA 5290 Topics in Planning: Design for Sustainable Development: Innovate**
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Marshall,Julian
Description:

**PA 5301 Population Methods & Issues for the United States & Global South**
3 credit(s);
Instructor: Kennedy,Sheela
Description: This course is a survey of the field of Population Studies. It covers the basic demographic methods used to measure mortality, fertility, migration, and population growth. Students will also gain familiarity with population trends in the U.S. and internationally. Topics covered include demographic transitions, trends in life expectancy and disability, HIV/AIDS, fertility and family planning, population growth and the environment, population aging, and family structure and living arrangements. The course will also emphasize the relationship between population policies, development, and population trends.
Style: 50% Lecture, 50% Discussion.
Grading: 35% reports/papers, 20% written homework, 25% additional semester exams, 5% reflection paper, 5% in-class presentation, 10% class participation.

**PA 5390 Topics in Advanced Policy Analysis Methods: Econometrics for Program and Policy Evaluation**
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Johnson,Janna Elizabeth
Description:

**PA 5401 Poverty, Inequality, and Public Policy**
3 credit(s);
Instructor: Hanratty,Maria J
Description: Nature/extent of poverty/inequality in the United States, causes/consequences, impact of government programs/policies. Extent/causes of poverty/inequality in other developed/developing countries.

**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: Fennelly,Katherine
Description: This course is either a four-credit (with final project) or three-credit (without final project) on-line computer-based course for public policy or health an education professionals who plan to work with immigrants or refugees and to become 'culturally competent.' See the FAQ for more information on how the class works. All other interaction takes place on the web site and in the community. Course Objectives: 1. Students will acquire research skills necessary to access demographic, health, and background information on immigrants in the U.S. 2. Students will understand the major characteristics and health needs of new immigrants. 3. Students will be able to design `culturally competent? health programs. 4. Students will learn to advocate for needed changes to promote immigrant health.

**PA 5490 Topics in Social Policy: Economics of Early Childhood Development**
3 credit(s), max credits 9, 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. Credit for this class counts as part of the graduate certificate in Early Childhood Policy. Students can enroll in PA 5490 or the cross-listed PA 5022 section. Required texts: Reynolds, A.J., Rolnick, A.J., Englund, M.E., and J. A. Temple (2010) Childhood Programs and Practices in the First Decade of Life: A Human Capital Integration. New York, NY: Cambridge University Press. Zigler, E.; Gilliam, W.S.; W. Steven Barnett (2011) The Pre-K Debates. Baltimore, MD: Brookes Publishing. In addition to the books above, the readings will include a number of journal articles and reports.

PA 5490 Topics in Social Policy: Education Law and Policy (K-12)
  3 credit(s), max credits 9, 3 completions allowed;
  Instructor: Kelley, Steve
  Description:

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 5503 Economics of Development
  A-F only, 3 credit(s);
  Instructor: Assaad, Ragui A
  Description:

PA 5511 Community Economic Development
  3 credit(s);
  Instructor: Streetar, Robert Edmund
  Description:

PA 5561 Gender and International Development
  3 credit(s);
  Instructor: Friedemann-Sanchez, Greta
  Description: Spell Check Course Guide Description (3,000 character limit) (Alt+5) Women and men are affected differently by development and participate differently in policy formulation and implementation. Gender-sensitive perspective. Historical, political context. Global South. Policy, practice, and experience (theory and measurement; international, national, local stakeholders; effects of policy and practice on development).

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 economies 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
PA 5711 Science and Technology Policy
3 credit(s);
Instructor: Husbands Fealing,Kaye
Description:

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 5790 Topics in Science, Technology, and Environmental Policy: Material-Energy Flows & Society
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ramaswami,Anu
Description: OVERVIEW: How do material and energy flows shape development of a sustainable society? Material-Energy Flows will be discussed in the context of: A) Resource depletion and recycling, B) Economic development, and, C) As a source of environmental pollution. Students will learn skills of direct material-energy flow analysis (MEFA), life cycle assessment (LCA), the combination of MEFA and LCA for environmental footprinting, economic input-output analysis, and cost benefit analysis for resource extractions/recycling decisions as well as pollution abatement decisions. The first half of the course will focus on general principles and methods in. In the second half, students will work on group projects, handling real-world data to develop environmental footprints of different units of society: 1. Production Systems ? businesses or industries 2. Infrastructure systems (energy supply, water supply); 3. Consumers (households) 4. Different Regions: National, State and Metropolitian/ City scales WEEKLY PLAN: Week 1 - Overview of Material-Energy Flows in Society: Global resources, renewable and non-renewable, Units and Conversions, Issues of material scarcity and interdependence of water-energy and materials Week 2: Material-Energy Flows in Different Units of Society: Producers (Industry and Businesses), Infrastructure (water supply, energy supply, transportation systems, etc.), Consumers (households), and Regions (nations, cities, metropolitan areas). Issues of resource scarcity and environmental pollution, and their relationship with sustainability. Week 3-4: General Principles/Methods:MEFA at different scales; MEFA and the Economy, Introduction to Economic Input Output tables. Week 5-6: General Principles & Methods: Life Cycle Assessment (LCA), Combining MEFA with LCA to develop resource use and pollution emission footprints Week 7-8: General Principles & Methods: Cost-Benefit Analysis for decisions about resource extraction, recycling and environmental pollution abatement Week 9-11: Material-Energy Use and Sustainability of Production Systems- Economic Aspects - Technical and economic feasibility of resource extraction and recycling, Cost-benefit analysis and decision-making Environmental Performance of products, industries and infrastructure services Examples of the mining industry, water or energy infrastructure, fisheries and recycling systems. Week 11: Material-Energy Flows and Sustainability of Consumers - focus on households, quality of life and sufficiency Week 12-14: Material-Energy Flows and Regional Sustainability - We will study the economy (GDP, job creation), resource use, and pollution footprints of cities, states and the US economy. Week 15: Final Presentation GRADING: 45% for three quizzes interspersed in the weeks; 30% for homework; and 25% for the group project. STUDENTS: Graduate or senior level standing, with high math literacy. INSTRUCTOR: Anu Ramaswami Grading: 45% quizzes. 30% for Homework. 25% for Group Project.

PA 5802 Global Economic Policy
3 credit(s);
Instructor: Kudrle, 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. Only a few of those 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: US Foreign Policy: The Institutional Basis
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Atwood, John Brian

Exam Format: No exam
This course will examine the institutions that influence American foreign and development policy. Institutions provide the organizational framework, rules and social structures that in turn impact on the work product of those who are part of them. One will often hear in places like Washington, DC, that "Where you sit determines what you think." This is only true up to a point as effective leadership and dynamism within the ranks of a change-oriented organization can enhance the capacity of an institution to innovate or respond to the demands of policymakers. However, bureaucratic structures are primarily designed to sustain themselves and often purposefully encumber themselves with rules that inhibit creative behavior. In the US Government, this creates tension with political appointees whose tenure is limited and whose need to achieve an externally generated set of goals (e.g. campaign promises) is often in conflict with the inertia that bureaucracies create. Some bureaucracies are crisis-oriented and their systems are designed for rapid response. Others have longer-term horizons and programmatic needs that inhibit fast response. Others are dominated by a largely domestic mission and are looking to utilize international engagement primarily to support their domestic objectives. The course will not limit itself to executive branch organizations. We will look at the roles of the Congress, the media, think tanks special interest groups. We also will review the role that international organizations like the United Nations play in influencing the policy choices of the United States Government. Special attention will be given to the political science theory known as liberal institutionalism. We will explore the practical challenges of implementing this theory in institutions that are often less responsive to the needs of policymakers.

**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 issues 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 5890 Topics in Foreign Policy and International Affairs: Human Rights and Development**
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ron, James
Description: This class explores the synergies between human rights and development. It begins with a close reading Katherine Boo's award winning book on life in a Mumbai slum, Behind the Beautiful Forevers (Random House, 2012). We then (briefly) reviews basic human rights and development debates, and then explore the "rights-based approach" to development by international and local NGOs. We also discuss religion, human rights and development; rights-based approaches to flood management, health, and sanitation; NGO efforts to protect sex workers; and the right-to-food movement in India. The class combines conceptual and practical readings. Your final assignment involves writing a proposal for a rights-based project on an issue of your own choosing. The class is taught by James Ron, the Stassen Chair of International Affairs (www.jamesron.com), whose work focuses on rights-based NGOs in the developing world. This graduate level offering is open to advanced undergraduates with instructor permission.
Style: 20% Lecture, 50% Discussion, 20% Student Presentation, 10% Web Based.
Grading: 50% reports/papers, 20% reflection paper, 15% in-class presentation, 15% class participation.

**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: Action-Oriented Strategy Mapping**
1 credit(s), max credits 12, 12 completions allowed;
Instructor: Bryson, John M
Description:
PA 5920 Skills Workshop: Public Communication
1.5 credit(s), max credits 12, 12 completions allowed;
Instructor: Levison, Deborah
Description: Professionals involved in policy and planning processes face increasing demands for clear and effective presentations, targeted to a variety of different types of audiences. Students will develop context-sensitive communication skills in persuasive public speaking and presentation design. They will record a very short presentation every week and sometimes present again in class.
Style: 40% Lecture, 10% Film/Video, 20% Discussion, 30% Student Presentation.

PA 5920 Skills Workshop: Strategic Social Media
1.5 credit(s), max credits 12, 12 completions allowed;
Instructor: Lundquist, Leah Marie Doerr
Description: Both public and nonprofit managers are facing citizen/taxpayer and constituent/donor expectations for a higher level of transparency and participation than ever before. In order to meet these demands and the organization's mission, it is essential to know how to go beyond understanding how to use social media tools to develop a networked mindset as both an organization and professional. How is social media currently being used in the public and nonprofit sectors to achieve higher levels of collaboration, engagement and participation? What are the competencies public and nonprofit professionals need around social communications? Through real-world examples and hands on practice, this skills workshop will help students build a foundational understanding of how social media can be leveraged strategically to achieve civic objectives.
Style: 10% Lecture, 20% Discussion, 20% Small Group Activities, 20% Student Presentation, 10% Guest Speakers, 20% Web Based.

PA 5941 Leadership for the Common Good
A-F only, 3 credit(s);
Instructor: Crosby, Barbara C
Description:

PA 5980 Topics in American Election Administration: Policy and Process
2-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Chapin, Douglas McCall
Description: PA 5980: Election Administration Doug Chapin | 202-365-0789 (cell) | e-mail: dchapin@umn.edu COURSE REQUIREMENTS: 1) Pre-class assignments (10% of grade) - Before each in-person class, you will have a short (500-1000 words) writing assignment that asks you to reflect on the readings and/or themes in advance of class. 2) Two online assessments (15% of grade) as part of this course, you will take two online short courses on topics within election administration. At the end of each course there will be a short assignment asking you to review and discuss the concepts presented. 3) Final paper (75% of grade) At the conclusion of class, you will be responsible for a slightly longer paper on the following topic: READINGS/ASSIGNMENTS Class 1 (9/20) Introduction, recent history and the "three tensions" In this class, we'll look overall at election administration, using recent (post-2000) history as a background. We'll also discuss three key tensions -- individual vs. community, fairness v. certainty and central v. local control -- that underpins most debates within the field. Class 2 (10/4) Federal, State and local election administration In this class, we'll look at how the three levels of government interact to manage different aspects of the election process. We'll also discuss the role of partisanship. Online lesson -- Voter Eligibility This online course explores the components of voter eligibility and examines how different states verify that eligibility as part of the voting process -- along with the limitations courts have placed on those efforts. Class 3 (10/18) Provisional Ballots/Non-precinct place voting Changes to the voting process -- namely, where when and how voters cast ballots are having a profound impact on the field. This class will explore the effects of provisional voting and the expansion of early, absentee and vote-by-mail on the administration of elections. Online lesson -- Voting Technology This online course introduces the different types of voting technology used in the United States -- both now and over time. It also examines the process by which such technology is tested and certified for use by election offices across the nation. Class 4 (11/8) Safeguarding the Process from Fraud and Error Much of the debate across the nation in recent years has been about the threat of fraud to the electoral process. In this class we'll talk about the different types of threats to the system -- not just fraud (malfeasance) but error (misfeasance) and then explore what processes and procedures have evolved to address these challenges.

PA 5990 Topics: Public Affairs--General Topics: Minnesota History
3 credit(s), max credits 9, 6 completions allowed;
Instructor: Stone, Paul Clois
Description:

PA 5990 Topics: Public Affairs--General Topics: Capstone in Global Public Policy
0 credit(s), max credits 9, 6 completions allowed;
Instructor: Gray, Sherry
Community development. The course will survey theories, challenges and strategies for neighborhood and community equity-minded framework for understanding and acting on urban poverty, community development, urban planning and more equitable urban neighborhoods and communities in the United States. To simply admiring the problem. We will explore the current state of urban neighborhoods and communities in the United States, with a focus on the Twin Cities of Minneapolis and St. Paul. Scholars, policy-makers and activists point to the concentration of poverty; the suburbanization of poverty; the connections between race, class gender, and housing; Federal and local poverty-focused initiatives; links between health, wealth and place, and more. The course will engage students in critical thinking about the history of urban communities, including the intended and unintended consequences of various polices and strategies. The course seeks to develop with students an action-oriented understanding rather than simply admiring the problem. We will explore the current state of urban neighborhoods and communities in the United States, with a focus on the Twin Cities of Minneapolis and St. Paul. Scholars, policy-makers and activists point to the spatial patterns of poverty, health and education disparities, crime, disinvestment and other issues impacting some inner-city communities. Students will explore the history, challenges and opportunities for strengthening and building stronger, more equitable urban neighborhoods and communities in the United States. We will also develop a race-conscious and equity-minded framework for understanding and acting on urban poverty, community development, urban planning and community development. The course will survey theories, challenges and strategies for neighborhood and community

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: Immigration and Occupational Regulation
A-F only, 3 credit(s), max credits 6;
Instructor: Kleiner, Morris M
Description:

PA 8081 Capstone Workshop: Political Advocacy in the Public Interest
A-F only, 3 credit(s), max credits 6;
Instructor: Fox, Jeannie
Description: Clients will be from a variety of nonprofit and public sector entities.

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: Mehta, Neeraj K
Description: For over a century, we have seen efforts to improve conditions in America’s central city neighborhoods. Since the beginning these debates have centered on who defines what improvement or revitalization should look like, whose interests should be paramount, and how best can revitalization be accomplished. The recent foreclosure and economic crisis have heightened awareness of the poverty in America and its neighborhood consequences such as concentration of poverty; the suburbanization of poverty; the connections between race, class gender, and housing; Federal and local poverty-focused initiatives; links between health, wealth and place, and more. The course will engage students in critical thinking about the history of urban communities, including the intended and unintended consequences of various polices and strategies. The course seeks to develop with students an action-oriented understanding rather than simply admiring the problem. We will explore the current state of urban neighborhoods and communities in the United States, with a focus on the Twin Cities of Minneapolis and St. Paul. Scholars, policy-makers and activists point to the spatial patterns of poverty, health and education disparities, crime, disinvestment and other issues impacting some inner-city communities. Students will explore the history, challenges and opportunities for strengthening and building stronger, more equitable urban neighborhoods and communities in the United States. We will also develop a race-conscious and equity-minded framework for understanding and acting on urban poverty, community development, urban planning and community development. The course will survey theories, challenges and strategies for neighborhood and community...
revitalization by engaging in critical thinking and discussion, readings, guest speakers, site visits and engaged scholarship in partnership with community-based organizations in the Twin Cities. Topics explored included: housing, education, jobs, transportation, mass incarceration, the environment, food systems and more. Strategies discussed will include community development corporations, community building, engagement and organizing, the role of the public sector, advocacy, social capital, crime, policing and punishment. Students will choose a class project during the semester that will engage with community-based organizations working around issues of neighborhood revitalization. This is a hands-on project that engages students in real-world, community-based problem solving.

PA 8312 Analysis of Discrimination
3 credit(s);
Instructor: Myers Jr, Samuel L
Description: This is a skills-based course designed to introduce students of applied economics, policy analysis and other applied social sciences to the tools of measuring and detecting discrimination in market and non-market contexts. The focus is on the application of the modern tools of labor econometrics and race relation research to specific problems of market and non-market discrimination. Students will read and critique classic journal articles on the economics of discrimination. They will also work through several exercises designed to sharpen empirical skills related to analyzing discrimination. Students are expected to have a working knowledge of intermediate microeconomics, basic statistics and regression analysis and some familiarity with STATA, SPSS, SAS or similar software programs.

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:

PA 8921 Master's: Professional Paper (Individual Option)
1-3 credit(s), max credits 3, 3 completions 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, 3 completions allowed;
Instructor: Goetz, Edward Glenn
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, 3 completions allowed;
Instructor: Kudrle, Robert T
Description: Student may contact the instructor or department for information.

PA 8922 Master's Paper: Plan B
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Husbands Fealing, Kaye
Description: Student may contact the instructor or department for information.
PA 8922 Master's Paper: Plan B
1-3 credit(s), max credits 3, 1 completion 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: Rolnick, Arthur Jeffrey
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, 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: 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: Swackhamer, Deborah 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: 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.

PA 8991 Independent Study
0.5-3 credit(s), max credits 6, 6 completions allowed;
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: Atwood, John
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: 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: Temple, Judy
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: Fatehi, Leili
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: Husbands Fealing, Kaye
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: 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: Schwatz, Eric Paul
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: Ramaswami, Anu
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.

Style: 100% Web Based. All lessons and readings are accessed via the course site. Lessons can be read and/or listened to via the computer or downloaded in text or mp3 format. Coursework requires approximately 45 hours of effort throughout the term.
Grading: 50% quizzes, 50% written homework.

PubH 1003 Alcohol and College Life (ACL)
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.

Style: 100% Web Based. All lessons and readings are accessed via the Moodle course site. Lessons can be read and/or listened to via the computer, printed in text format, or downloaded in mp3 format. Coursework requires approximately 45 hours of effort throughout the term.
hours of effort throughout the term.

Grading: 45% quizzes, 55% written homework.

PubH 1004 Sexuality Matters
1 credit(s);
Instructor: Matson, Emily Ann
Description: The purpose of this course is to equip students with the knowledge and skills necessary to lead healthy sexual lives. Recognizing the inconsistency and diverse range of previous sexuality education among students, this course is intended to fill those gaps and provide a solid foundation based on unbiased, medically accurate, and evidence-based information and programs. Sexuality Matters seeks to increase knowledge, build communication skills, help clarify personal values, and dispel myths regarding sexuality and relationships. Sexuality is a part of everyone's lives, and this course takes a comprehensive approach to education. When students are comfortable with their sexuality and can effectively communicate about and advocate for their needs, they are more likely to make informed and healthier decisions. We hope to provide students with tools to help them during their college years and throughout the rest of their lives.

Style: 100% Web Based. All lessons and readings are accessed via the Moodle course site. Lessons can be read and/or listened to via the computer or downloaded in text or mp3 format. Coursework requires approximately 45 hours of effort throughout the term.

PubH 1005 Sleep, Eat, and Exercise
1 credit(s);
Instructor: Kjolhaug, Jerri Rae
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 while 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.

Style: 100% Web Based. All lessons and readings are accessed via the course site. Lessons can be read and/or listened to via the computer or downloaded in text or mp3 format. Coursework requires approximately 45 hours of effort throughout the term.

Grading: 40% quizzes, 60% written homework.

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: Lando, Harry A
Description: Student may contact the instructor or department for information.

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: Lando, Harry A
Description: Student may contact the instructor or department for information.

PubH 3004 Basic Concepts in Personal and Community Health
4 credit(s); Credit will not be granted if credit received for: 3001 Credit will not be granted if credit has been received for: PUBH 3003;
Instructor: Lando, Harry A
PubH 3005 Fundamentals of Alcohol and Drug Abuse for Teacher Education
1 credit(s); Undergrad in agricultural education or business/marketing education or career/technical education or foundations of education or [kinesiology, pre-PE] or technology education or music education
Credit will not be granted if credit has been received for: PUBH 3003;
Instructor: Matson, Emily Ann
Description: PubH 3005 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 14 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: Undergrad in agricultural education, business/marketing education, career/technical education, foundations of education, kinesiology/pre-PE, technology education or music education. 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, 3032, 3033, 5003, 5023, or 6003. Students must have access to a computer and the internet, as well as having basic computing skills. (To assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/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 3010 Public Health Approaches to HIV/AIDS
2 credit(s); Credit will not be granted if credit has been received for: PUBH 6010;
Instructor: Rosser, B. R. Simon
Description: Student may contact the instructor or department for information.

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: Logan, Sarah Rachel
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: Lee PhD, Petrona
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 3415 Introduction to Clinical Trials - Online
A-F only, 3 credit(s);
Instructor: Telke, Susan Elizabe
Description: Student may contact the instructor or department for information.

PubH 3802 Health and Human Rights
3 credit(s);
Instructor: Allison, Kirk Charles
Description: Student may contact the instructor or department for information.

PubH 3893 Directed Study: Health Services Research and Policy
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Allison, Kirk Charles
Description: Student may contact the instructor or department for information.

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: Steffen PhD, Lyn M
Description: Student may contact the instructor or department for information.

PubH 3940 Concepts and Controversies in Public Health Nutrition and Health Promotion
1 credit(s);
Instructor: Pereira PhD, Mark A
Description: Student may contact the instructor or department for information.

PubH 3950 From Kid to Community: Personal, Social and Environmental Influences on Youth Obesity
2 credit(s);
Instructor: Larson, Nicole I
Description: Student may contact the instructor or department for information.

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 14 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: Rosser, B. R. Simon
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;
Instructor: Nelson, Toben F
Description: Student may contact the instructor or department for information.

PubH 6035 Applied Research Methods
3 credit(s);
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: Brady,Sonya S.
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 6074 Mass Communication and Public Health
3 credit(s);
Instructor: Nagler,Rebekah H
Description: Student may contact the instructor or department for information.

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 6101 Environmental Health
A-F only, 2 credit(s);
Instructor: Toscano Jr PhD,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.
**PubH 6102 Issues in Environmental and Occupational Health**
- A-F only, 2 credit(s);
- Public health [MPH or MHA or certificate] student or health journalism MA major or nursing MS student or instr consent
- Credit will not be granted if credit has been received for: PUBH 3102;
- Instructor: Lee PhD,Petrona
- Description: Student may contact the instructor or department for information.

**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 6134 Sustainable Development and Global Public Health  
2 credit(s);  
Instructor: Toscano Jr PhD, William A  
Description: Student may contact the instructor or department for information.

PubH 6151 Occupational and Environmental Health Nursing Seminar  
S-N only, 1 credit(s), max credits 6, 6 completions allowed;  
Instructor: McGovern, Patricia Marie  
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: Bey, Jean M. Alberg  
Description: Student may contact the instructor or department for information.

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 6192 Measurement and Properties of Air Contaminants  
A-F only, 2 credit(s);  
Instructor: Ramachandran, Gurumurthy  
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: Lakshminarayanan, 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
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 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 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 III
4 credit(s);
Instructor: Schreiner, Pamela Jean
Description: Student may contact the instructor or department for information.
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, Jim
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 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 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: Leduc, Robert Edgar
Description: Student may contact the instructor or department for information.

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: Le, Laura Jean
Description:

PubH 6470 SAS Procedures and Data Analysis
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 6535 Managerial Accounting for Health Services
A-F only, 3 credit(s);
Instructor: Kramer, Jack
Description: Student may contact the instructor or department for information.

PubH 6541 Statistics for Health Management Decision Making
PubH 6542 Management of Health Care Organizations
  A-F only, 3 credit(s);
  Instructor: Hart,Gregory Wayne
  Description: Student may contact the instructor or department for information.

PubH 6553 Health Care Management Ethics
  A-F only, 1 credit(s), max credits 2;
  Instructor: Drill-Mellum,Richard D
  Description: Student may contact the instructor or department for information.

PubH 6555 Topics in Health Economics
  A-F only, 2 credit(s);
  Instructor: Abraham,Jean Marie
  Description: Student may contact the instructor or department for information.

PubH 6556 Health and Health Systems
  A-F only, 3 credit(s);
  Instructor: Christianson,Jon B
  Description: Student may contact the instructor or department for information.

PubH 6558 Health Finance II
  A-F only, 3 credit(s);
  Instructor: McCullough,Jeffrey S
  Description: Student may contact the instructor or department for information.

PubH 6560 Operations Research and Quality in Health Care
  A-F only, 2 credit(s);
  Instructor: Potthoff,Sandra Jean
  Description: Student may contact the instructor or department for information.

PubH 6562 Information Technology in Health Care
  2 credit(s);
  Instructor: Edgerton,David
  Description: Student may contact the instructor or department for information.

PubH 6563 Integrated Delivery Systems
  A-F only, 2 credit(s);
  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.
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: 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 Public Health 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 6675 Women's Health
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 6702 Integrative Leadership Seminar
3 credit(s);
Instructor: White, Katie Marie
Description: This is an interdisciplinary, 3-credit seminar led by co-instructors from multiple schools of the university. Students will: a) learn to recognize and diagnose integrative leadership challenges and opportunities; b) build their own capacities to practice integrative leadership through group work in individualized peer-to-peer coaching in diverse teams and through being exposed to a range of boundary work practices; and c) gain better knowledge of the leadership contexts within their own profession and in other sectors. We emphasize contexts for integrative leadership at five basic levels: within individuals, within and across groups, within and across organizations, within and across sectors, and at the societal scale. Learning occurs through reading foundational materials, personal leadership coaching, engaging extensively with examples from guest speakers and case materials, developing a group capstone project on integrative leadership, and iteratively co-producing an understanding of what integrative leadership is. This course is sponsored by four departments. If PA 5105 shows as full, please check for space under the other departments - MGMT 6402, OLPD 6402, and PubH 6702. They are all for the same class, with the same instructors, meeting at the same time. Every section in all four schools must be filled before any over-ride permission numbers are issued. If all class sections are full, please contact Merrie Benasutti at the Center for Integrative Leadership (624-8300) for a permission number.
Style: 15% Lecture, 20% Discussion, 25% Small Group Activities, 10% Student Presentation, 15% Guest Speakers, 15% Web Based.
Grading: 30% reports/papers, 30% reflection paper, 20% class participation, 20% other evaluation. Participation in class-based learning and discussion - 20% Biweekly reading notes and biweekly reflection notes - 30% Team case study project research, presentation, and report - 30% Integrative leadership peer-to-peer coaching: 20%

PubH 6717 Decision Analysis for Health Care
2 credit(s);
Instructor: Enns, Eva
Description: Student may contact the instructor or department for information.

PubH 6724 The Health Care System and Public Health
3 credit(s);
Instructor: Golberstein, Ezra
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: Begun, James Warren
Description: Equips students with analytical skills to understand organizations and organization behavior. Develops management and leadership competencies that enable students to make a positive difference in their work organizations and in the health of populations.
Style: 50% Lecture, 5% Film/Video, 25% Discussion, 20% Small Group Activities. Online section is 100% web based
Grading: 40% mid exam, 45% final exam, 15% attendance.
Exam Format: take-home, open books

PubH 6755 Planning and Budgeting for Public Health
OPT No Aud, 2 credit(s);
Instructor: Barry, Anne M
Description: Student may contact the instructor or department for information.

PubH 6765 Continuous Quality Improvement: Methods and Techniques
3 credit(s);
Instructor: McCoy, Kim
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 60, 20 completions allowed;
Instructor: Malcolm, Jan Kathleen
Description: Student may contact the instructor or department for information.

PubH 6780 Topics: Public Health Administration and Policy: Advanced Quality Improvement Methods in PubH
2 credit(s), max credits 60, 20 completions allowed;
Instructor: Riley, William J
Description: Student may contact the instructor or department for information.

PubH 6800 Topics: Health Services Research and Policy: Public Health Systems Analysis and Development
3 credit(s), max credits 80, 20 completions allowed;
Instructor: Kreiger, Robert A
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 6806 Principles of Public Health Research
2 credit(s);
Instructor: Shippee, Nathan D
Description: Student may contact the instructor or department for information.

PubH 6806 Principles of Public Health Research
2 credit(s);
Instructor: Shippee, Tetyana Pylypiv
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
A-F only, 2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

PubH 6900 Topics: Public Health Nutrition: Kid to Comm: Pers, Soc & Env Infl on Youth Obesity
2 credit(s), max credits 80, 20 completions allowed;
Instructor: Larson, Nicole I
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
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: Steffen PhD, Lyn M
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 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: Jones-Webb, Rhonda 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: Lifson, Alan Raymond
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: 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: 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: Alexander, Bruce H
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 PhD, 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: 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: Allwood, Paul Bancroft
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 7194 Master's Project: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Toscano Jr PhD,William A
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: Wattenberg,Elizabeth Vaughn
Description: Student may contact the instructor or department for information.
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 PhD, 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: Waters, Katherine Cecilia  
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: Spector, Logan G
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: Kulasingam, Shalini L
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: Nguyen, Ruby H.N.
Description: Student may contact the instructor or department for information.

PubH 7401 Fundamentals of Biostatistical Inference
4 credit(s);
Instructor: Vock, David M
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
PubH 7460 Advanced Statistical Computing
3 credit(s);
Instructor: Pan, Wei
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 Culminating Experience: Biostatistics
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Neaton, Jim
Description: Student may contact the instructor or department for information.

PubH 7494 Culminating Experience: Biostatistics
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Hughes, John
Description: Student may contact the instructor or department for information.

PubH 7537 Health Finance II
A-F only, 3 credit(s);
Instructor: McCullough, Jeffrey S
Description: Student may contact the instructor or department for information.

PubH 7541 Statistics for Health Management Decision Making
OPT No Aud, 3 credit(s);
Instructor: Abraham, Jean Marie
Description: Student may contact the instructor or department for information.

PubH 7553 Health Care Management Ethics
A-F only, 1 credit(s), max credits 2;
Instructor: Drill-Mellum, Richard D
Description: Student may contact the instructor or department for information.

PubH 7560 Operations Research and Quality in Health Care
A-F only, 2 credit(s);
Instructor: Potthoff, Sandra Jean
Description: Student may contact the instructor or department for information.

PubH 7566 Core Concepts in Managing Health Care Organizations
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Gilliam, Thomas Richard
Description: Student may contact the instructor or department for information.

PubH 7572 Health Care Strategies in Competitive Markets
A-F only, 2 credit(s);
Instructor: Zismer, Daniel Kevin
Description: Student may contact the instructor or department for information.

PubH 7573 Managing the Embedded Medical Practice
A-F only, 2 credit(s);
Instructor: Bauer, Paul J
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: Stang, Jamie Sue
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: Stang, Jamie Sue
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: Stang, Jamie Sue
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, 2 credit(s);
Instructor: Peterson, Heather Lynn
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, 2 credit(s), max credits 4;
Instructor: Potthoff, Sandra Jean
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, 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, 2 credit(s), max credits 4;  
Instructor: Kozhimannil,Katy Backes  
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, 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, 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, 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, 2 credit(s), max credits 4;  
Instructor: Kuntz,Karen M  
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: Miles,Aida  
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: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

PubH 8160 Advanced Toxicology  
A-F only, 2 credit(s);  
Instructor: Toscano Jr PhD,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 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 PhD,William A
Description: Student may contact the instructor or department for information.

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 8393 Directed Study: Clinical Research
1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Ross,Julie A
Description: Student may contact the instructor or department for information.

PubH 8400 Topics: Biostatistics: Research Skills in Biostatistics
0.5-4 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
4 credit(s);
Instructor: Wu,Baolin
Description: Student may contact the instructor or department for information.

PubH 8422 Modern Nonparametrics
3 credit(s);
**Instructor:** Hughes, John  
**Description:**  
**Style:** 90% Lecture, 10% Student Presentation.  
**Grading:** 50% special projects, 50% written homework.

**PubH 8432 Probability Models for Biostatistics**  
3 credit(s);  
**Instructor:** Wu, Baolin  
**Description:** Student may contact the instructor or department for information.

**PubH 8445 Statistics for Human Genetics and Molecular Biology**  
3 credit(s);  
**Instructor:** Basu, Saonli  
**Description:** Student may contact the instructor or department for information.

**PubH 8482 Sequential and Adaptive Methods for Clinical Trials**  
3 credit(s);  
**Instructor:** Koopmeiners, Joe  
**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:** Thomas, William  
**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:** Pan, Wei  
**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 8494 Directed Research: Biostatistics**  
S-N only, 1-4 credit(s), max credits 4, 4 completions allowed;  
**Instructor:** Eberly, Lynn Elizabeth  
**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:** Basu, Saonli  
**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 8831 Writing for Research
OPT No Aud, 2 credit(s);
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: Radosevich PhD,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: Call PhD,Kathleen Thiede
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: Wholey,Douglas R
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 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, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 3011 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 3011 Clinical Practicum I
A-F only, 5 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 4011 Radiographic Procedures III
A-F only, 3 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 4241 Radiation Protection Advanced Imaging
A-F only, 3 credit(s);
Instructor: Anderson, Jill Marie
Description: Student may contact the instructor or department for information.

Radi 4011 Clinical Practicum IV
A-F only, 7 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, Chip
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 from 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 3101 Park and Protected Area Tourism
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: RRM 5101;
Instructor: Carlson PhD, Stephan Paul
Description: Student may contact the instructor or department for information.

RRM 5101 Park and Protected Area Tourism
A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: RRM 3101;
Instructor: Carlson PhD, Stephan Paul
Description: Student may contact the instructor or department for information.

Recreation, Park, and Leisure Studies
220 Cooke Hall

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
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.

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**Rec 1905 Freshman Seminar: Go Outside and Play!**

*OPT No Aud, 3 credit(s), max credits 6;*

**Instructor:** Magnuson PhD, Connie

**Description:** 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 Thursdays 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?

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**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.

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**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.

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**Rec 3796 Senior Internship in Recreation, Park, and Leisure Studies**

*S-N only, 9 credit(s);*

**Instructor:** Magnuson PhD, Connie

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

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

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**Rec 3993 Directed Study in Recreation, Park, and Leisure Studies**

*A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;*

**Instructor:** Kane PhD, Mary Jo

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

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

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**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:** Student may contact the instructor or department for information.
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:** Kihl PhD, Lisa A  
**Description:** Student may contact the instructor or department for information.

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:** Loher JD, Vickie Lynn  
**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 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: Kane PhD, Mary Jo
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.

Rec 5992 Readings: Recreation
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
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: Kane PhD, Mary Jo
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 5995 Problems 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: 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: Student may contact the instructor or department for information.

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

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: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

Rehabilitation Science 382 Children's Rehabilitation Center (Box 388 UMHC)

RSc 5101 Mathematical Tools for Research Applications in Health, Rehab, and Human Movement Sciences
A-F only, 1 credit(s);
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 5135 Advanced Biomechanics I: Kinematics
A-F only, 3 credit(s);
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 5200 Introduction to Transcranial Magnetic Stimulation
A-F only, 3 credit(s);
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

RSc 5231 Clinical Biomechanics
A-F only, 2-5 credit(s), max credits 5, 1 completion allowed; Concurrent registration is required (or allowed) in PT 6231, general physics, [intro or short] calculus, anatomy; intensive anatomy course in human cadaver dissection recommended Credit will not be granted if credit has been received for: PMED 5231;
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: Carey, James Robert
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: Mathiowetz PhD, Virgil 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: Martin PhD, Peggy Mae
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: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Thompson PhD, LaDora V
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: 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 8100 Rehabilitation Science Seminar
A-F only, 1 credit(s), max credits 6, 6 completions allowed;
Instructor: Martin PhD, Peggy Mae
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Mathiowetz PhD, Virgil G
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Martin PhD, Peggy Mae
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Kimberley, PT, PhD, Teresa Jacobson
Description: Student may contact the instructor or department for information.
RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Thompson PhD, LaDora V
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Lowe, Dawn Annette
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Kukulka, Carl G
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1 credit(s);
Instructor: Gillick, Bernadette Therese
Description: Student may contact the instructor or department for information.

RSc 8135 Advanced Kinesiology
A-F only, 3 credit(s);
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
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: 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
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: Gillick, Bernadette Therese
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: 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
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: Martin PhD, Peggy Mae
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: Snow MD, PhD, LeAnn M
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: Kimberley, PT, PhD, Teresa Jacobson
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: Thompson PhD, LaDora V
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: Ludewig, Paula M
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:** Lowe, Dawn Annette  
**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:** Kukulka, Carl G  
**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:** Gillick, Bernadette Therese  
**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;  
**Instructor:** Mathiowetz PhD, Virgil G  
**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:** Martin PhD, Peggy Mae  
**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:** Snow MD, PhD, LeAnn 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:** Kimberley, PT, PhD, Teresa Jacobson  
**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:** Thompson PhD, LaDora V  
**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:** 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:** Kukulka, Carl G  
**Description:** Student may contact the instructor or department for information.
Religious Studies

ReIS 1002 Introduction to the Study of Religions in America
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Kilde, Jeanne Halgren
Description: Religions, while readily identifiable, are notorious difficult to pin down or define precisely. Although religions are frequently thought of a stable or even eternal, the complex web of practices, discourses, communities, and institutions that make up specific religions change significantly over time, buffeted by on-going internal and external pressures -- from members, society, and culture. Despite this changing character, religions are highly influential as individuals and groups often call upon religious ideas or principles to address personal, social and political issues. Because of the widespread influence of religion in daily and civic life, knowledge of different religions is an increasingly valuable asset in one's personal life as well as on the job. Religions are studied from a variety of perspectives in the academy. Religious writings are examined by philologists and textual studies scholars, beliefs and practices by anthropologists, communities and institutions by sociologists and historians. Each of these areas has developed tools to explore religions, and newer areas of interdisciplinary study have also emerged to provide ever more in-depth approaches to religions. Keep in mind that the study of religions at the University of Minnesota is empirical study ?about? religions and is not intended to advance (or denigrate) any religion. This course is designed to expose students to some of the fundamental issues that inform the study of religions and familiarize them with the vocabulary and analytical tools used to describe, illuminate, and interpret religious activities and ideas, communities and institutions. We will emphasize the fact that religion is studied from a number of different perspectives (e.g. believers and non-believers) and from the standpoint of many disciplines (history, sociology, philosophy, anthropology, textual studies, art history, and many others). Our studies will juxtapose examination of religions from the inside ? from the perspective of believers or practitioners ? with analysis of them from the outside ? from the perspective of non-believers or academic empiricism. We will read a number of first-hand accounts of religions and screen video material of religious practices. We will also explore several methods of critically examining religions, and practice applying those methods to the first-hand material, in the process, evaluating the methods themselves as well as the practices.
Style: 50% Lecture, 15% Film/Video, 30% Discussion, 5% Guest Speakers.
Grading: 15% mid exam, 15% final exam, 50% reports/papers, 20% quizzes.

ReIS 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, ReIS 3034; Credit will not be granted if credit has been received for: JWST 1034; Meets CLE req of Historical Perspectives
Instructor: Paradise, Natan
Description: Who is a Jew? What do Jews believe? What do Jews do? What do we mean by "religion"? How do Jews read texts within their tradition? And perhaps most importantly, how many answers are there to a Jewish question? Explore the mythic structures, key texts, historical experiences, narratives, practices, beliefs and worldviews of the Jewish people as they have developed over more than three millennia. Learn about the roots of Judaism in the Hebrew Bible and the history of ancient Israel, and then discover the creative forces that developed within Judaism as a national narrative confront the forces of history, especially in the forms of the Persian, Greek, and Roman empires. From the development of Rabbinic Judaism to encounters with the rise of Christianity and then Islam, from the Jewish experience in the medieval world to Judaism's engagement with the enlightenment and modernity, from the Crusades to the Holocaust, from Ancient Israel to modern Israel, learn how the Jewish people have maintained ideas and identities despite being scattered across time and place for 2500 years.

ReIS 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: Levinson PhD, Bernard M.
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. Consequently, the course does not address
personal religious belief or matters of faith. All texts and all religious traditions will be examined analytically. Students are expected to understand and master this approach, which includes questioning conventional cultural assumptions about the historical composition and authorship of the Bible. Willingness to ask such questions and openness to new ways of thinking and reading are essential to successful participation in the course. This course meets the Literature LE Requirement.

**Style:** 90% Lecture, 10% Discussion.

**Grading:** 20% mid exam, 25% final exam, 30% reports/papers, 5% written homework, 20% additional semester exams. Regular very short homework assignments are collected; best 10 out of 12 are counted. There will be two mid-term exams each worth 20%. There will be two short papers each worth 15%.

**Exam Format:** Each exam is 50% essay and 50% multiple choice.

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**ReIS 3034 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:** Paradise, Natan

**Description:** Who is a Jew? What do Jews believe? What do Jews do? What do we mean by "religion"? How do Jews read texts within their tradition? And perhaps most importantly, how many answers are there to a Jewish question? Explore the mythic structures, key texts, historical experiences, narratives, practices, beliefs and worldviews of the Jewish people as they have developed over more than three millennia. Learn about the roots of Judaism in the Hebrew Bible and the history of ancient Israel, and then discover the creative forces that developed within Judaism as a national narrative confronted the forces of history, especially in the forms of the Persian, Greek, and Roman empires. From the development of Rabbinic Judaism to encounters with the rise of Christianity and then Islam, from the Jewish experience in the medieval world to Judaism's engagement with the enlightenment and modernity, from the Crusades to the Holocaust, from Ancient Israel to modern Israel, learn how the Jewish people have maintained ideas and identities despite being scattered across time and place for 2500 years.

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**ReIS 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: HIST 3778;* Instructors: 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.

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**ReIS 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:** Levinson PhD, Bernard M.

**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. Consequently, the course does not address personal religious belief or matters of faith. All texts and all religious traditions will be examined analytically. Students are expected to understand and master this approach, which includes questioning conventional cultural assumptions about the historical composition and authorship of the Bible. Willingness to ask such questions and openness to new ways of thinking and reading are essential to successful participation in the course. This course meets the Literature LE Requirement.

**Style:** 90% Lecture, 10% Discussion.

**Grading:** 20% mid exam, 25% final exam, 30% reports/papers, 5% written homework, 20% additional semester exams. Regular very short homework assignments are collected; best 10 out of 12 are counted. There will be two mid-term exams
each worth 20%. There will be two short papers each worth 15%.

Exam Format: Each exam is 50% essay and 50% multiple choice.

RelS 3321 American Indian Philosophies
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Chebregzi, 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.

RelS 3322 Introduction to Aztec, Maya, and Inka Art, from Ancient Times to the Colonial Period.
3 credit(s); Credit will not be granted if credit has been received for: ARTH 3205; Meets CLE req of Arts/Humanities
Instructor: Afanador-Pujol, Angelica J
Description: Student may contact the instructor or department for information.

RelS 3415W Art of India
4 credit(s); Credit will not be granted if credit has been received for: ARTH 3014W; Meets CLE req of Writing Intensive
Instructor: Asher, Frederick M
Description: This course looks at the extraordinary range of visual material produced in the Indian subcontinent, ranging from the magnificent cities of the Harappan culture, probably the most advanced anywhere in the world at their time, to the works illustrating Buddhist narratives for residents of monasteries in the homeland of Buddhism. It looks at the conception of extraordinary Hindu temples to the magnificent Islamic structures of the Indian subcontinent. And it considers the role of manuscript painting as well as the works produced under British colonial domination and during independent India as well as Bollywood cinema. Finally, the course considers the art of India beyond the Indian subcontinent, that is, as part of the global Indian Diaspora. There will be two papers, one a short paper on a film, the other a research paper that takes advantage of the unparalleled library resources at the University of Minnesota, two exams, and a final exam. Weekly sections offer the opportunity to discuss issues that the visual material presents.
Style: 80% Lecture, 20% Discussion.
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.
Exam Format: Brief essay

RelS 3415W Art of India
4 credit(s); Credit will not be granted if credit has been received for: ARTH 3014W; Meets CLE req of Writing Intensive
Instructor: Asher, Frederick M
Description: When one thinks of the countries comprising South Asia - India, Pakistan, Afghanistan and Bangladesh - Westerners often think of massive social, political and economic problems. Not adequately recognized, however, is the power of art in the region: the power to induce the Taliban to destroy the massive and world renown Bamiyan Buddhas, the power to stimulate mobs intent on ransacking an exhibition of art or to destroy a mosque of great historical importance. By looking at the power of art in this part of the world, we can better reflect on the power of the visual world around us every day. Simply stated, the art of South Asia is extraordinary. The course will examine both secular art and the works produced for the region's several religions, reflecting a diversity not unlike that of the United States. In the process, students will be given an opportunity to examine critically art and its production as well as the ways in which the art has been used and understood both at the time of its creation and subsequently. There will be two exams and one paper. Discussion sections will offer the opportunity to probe the material in greater depth and review as necessary. All material discussed in class will be available on the Web. The course assumes neither prior knowledge of India nor of art history.
Style: 80% Lecture, 20% Discussion.
Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% class participation.
Exam Format: Brief essay

RelS 3520 History of the Holocaust
3 credit(s); Credit will not be granted if credit has been received for: RELS 3521W;
Instructor: Schmieder, Falko
Description: Student may contact the instructor or department for information.

RelS 3535 Death and the Afterlife in the Ancient World
3 credit(s); Credit will not be granted if credit already received for: RelA 3535, RelA 5535, CNES 3535, CNES
RelS 3714 Islam and the West

3 credit(s); Credit will not be granted if credit has been received for: CAS 3533; Meets CLE req of Arts/Humanities

Instructor: Bashiri, Iraj

Description: The tension, anxiety, and hatred between Islam and the West have historical, philosophical, and ideological roots. "Islam and the West" examines those roots and looks for common ground. The course is divided into three parts. Part one studies the principles and beliefs of Sunni and Shi'ite Muslims in the context of the pre-Islamic civilizations of the Mediterranean world. Part two studies the interaction between great medieval thinkers, concentrating on the fateful decision that each made: Muslim theologians set a spiritual course for Islam while Western theologians supported reason as well. Part three discusses the development of events in the Middle East from W.W.I to the present, which includes, among other things, the division of the Middle East into nation-states, Pan-Islamism, the rise of the Muslim Brotherhood, and the Arab Spring.

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.
ReIS 3715 History of the Crusades
3 credit(s); Credit will not be granted if credit has been received for: HIST 3613;
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

ReIS 3993 Directed Studies
1-4 credit(s), max credits 10, 5 completions allowed;
Instructor: Kilde,Jeanne Halgren
Description: Student may contact the instructor or department for information.

ReIS 4309 Religion in American Public Life: Culture, Politics, and Communities
3 credit(s); Soc majors/minors must register A-F
Credit will not be granted if credit has been received for: SOC 4309; Meets CLE req of Civic Life and Ethics
Instructor: Edgell,Penny A
Description: This course will focus on the "public face" of religion in the U.S. When it comes to belief, identity, and belonging, the American religious landscape is one of diversity and increasingly rapid change. The post-1965 wave of immigration has increased the number and visibility of new religious groups in the United States. And Americans under the age of 35 are embracing religious practices and beliefs but not organized religion? fully 30% of younger generations claim no religious affiliation, a rapid and fundamental shift from their parents? generation. The purpose of this course is to help you understand contemporary American religion, in all its diversity and inter-generational differences, with a special focus on the public impact of religious groups and leaders. How does religion affect local communities, shape our political discourse, foster social movements, and influence national policies? We will explore the answers to these questions through examining sociological research on how religious groups engage in political action, foster particular understandings of democracy and styles of civic participation, influence volunteering, and shape individuals? views on issues such as race, poverty, science education, the family, and sexuality. Weekly student-led discussions will help you to use the insights of scholarly works to become more critical and educated readers of mass-media-based news about religion in our society. Civic life is comprised of voluntary, face-to-face arenas of activity that are not controlled by the state. Civic arenas are where citizens debate ethics, broadly conceived; where ideas of the good society are formed, debated, shared, and contested. The civic arena is diverse, with many types of secular and religious organizations. Through its role in civic life, religion is an important and visible arena for the construction of ethical discourse and understandings of the public (and the private) good. This course will help you develop a critical understanding of the ethical claims made by spokespersons for religious organizations, viewpoints, and movements, and assess the role that such claims have in shaping public discourse, legal outcomes, and policy outcomes. In a supportive environment, students will be prompted to consider their own religious and ethical beliefs in light of the range of such views in contemporary American society. The course emphasizes the diversity and variety of religious and political traditions in the United States, and that religious arenas are only one of many locations for the development of ethical discourse in American life. This course is open to majors and non-majors and fulfills the LibEd requirement for Civic Life and Ethics.
Style: 50% Lecture, 50% Discussion.
Grading: 25% mid exam, 25% final exam, 50% in-class presentation. In-class presentations are made to a small group (5 students); each presentation counts as 20% of your grade, and 10% is for attending group discussions of other members? presentations.
Exam Format: short answer and essay

ReIS 4952 Final Project
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Kilde, Jeanne Halgren
Description: Student may contact the instructor or department for information.

RelS 4952 Final Project
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Bashiri, Iraj
Description: Student may contact the instructor or department for information.

RelS 4952 Final Project
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Sellew, Philip
Description: Student may contact the instructor or department for information.

RelS 4952 Final Project
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

RelS 4952 Final Project
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Edgell, Penny A
Description: Student may contact the instructor or department for information.

RelS 4952 Final Project
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Matar, Nabil I
Description: Student may contact the instructor or department for information.

RelS 5326 Art of the Inka and their Ancestors
3 credit(s); Jr. or Sr. or grad student Credit will not be granted if credit has been received for: ARTH 5802;
Instructor: Afanador-Pujol, Angelica J
Description: Student may contact the instructor or department for information.

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); Meets CLE req of Technology and Society
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 4400 Advanced Adult Respiratory Critical Care Techniques
A-F 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: Johnson PhD,Kim KP
Description: This course examines several different ethical viewpoints (e.g., virtue, deontological, contractarian) and how they could apply to decision making concerning the design, manufacture, retailing, and consumption of apparel. Topics covered include who owns the intellectual content of designed products, who should be making our clothing, do consumers want recycled apparel, what does it mean for a retailer to be socially responsible, and what does socially responsible consumption of apparel look like?
Style: 40% Lecture, 20% Film/Video, 10% Discussion, 10% Small Group Activities, 20% Web Based. Videos, discussions, small group activies take place online. Course is hybrid between online and inclass.
Grading: # exams = 46% of grade quizzes = 30% discussion = 8% reflection papers = 15%
Exam Format: multiple choice, true/false. short answer, fill in the blank

RM 2196 Work Experience in Retail Merchandising
S-N only, 1-4 credit(s), max credits 8;
Instructor: Johnson PhD,Kim KP
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 2196 Work Experience in Retail Merchandising  
S-N only, 1-4 credit(s), max credits 8;  
Instructor: Im, Hyunjoo  
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: Kim, Hye-Young  
Description: Student may contact the instructor or department for information.

RM 2215 Introduction to Retail Merchandising  
A-F only, 3 credit(s);  
Instructor: Im, Hyunjoo  
Description: This course introduces the world of retailing to students. Retailing includes many exciting aspects and has become increasingly sophisticated due to the advancement of technology. Students in this class will discuss and explore the issues from diverse facets of retailing through readings, discussions, and activities.  
Grading: 22% mid exam, 22% final exam, 24% quizzes, 25% written homework, 7% class participation.

RM 3201 Career and Internship Preparation for Retail Merchandising  
A-F only, 1 credit(s);  
Instructor: Rechtzigel MS, Dana  
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: Choi, Dooyoung  
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: Im, Hyunjoo  
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: Im, Hyunjoo
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, 2 credit(s);
Instructor: Wu, Juanjuan
Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
S-N only, 2 credit(s);
Instructor: Im, Hyunjoo
Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
S-N only, 2 credit(s);
Instructor: Kim, Hye-Young
Description: Student may contact the instructor or department for information.

RM 4216 Retail Promotions
A-F only, 3 credit(s), max credits 4, 1 completion allowed; 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: Students learn principles and practices of retail promotions. Theoretical background to make promotion decisions is covered as well as ways to design effective integrated marketing communication plans.

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: See attached syllabus
Exam Format: Supervised, in-person exams

Russ 1101 Beginning Russian II
5 credit(s); 1101 or equiv Credit will not be granted if credit has been received for: RUSS 4102;
Instructor: Jahn, Gary R
Description: See the course URL

Russ 1102 Beginning Russian II
5 credit(s); 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: See attached syllabus
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: Schweikert, Maria S
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. 70% recitation and interactive oral activities.
Grading: 25% final exam, 70% quizzes, 5% attendance.
Exam Format: Fill in; translation to Russian; open-ended response.

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: Polakiewicz, Leonard Anthony
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. 70% recitation and interactive oral activities.
Grading: 60% quizzes, 20% written homework. 20% class participation and oral presentations.
Exam Format: Fill in; translation to Russian; open-ended response.

Russ 3101 Advanced Russian I
4 credit(s); 3002 or 4104 or instr consent Credit will not be granted if credit has been received for: RUSS 4111;
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
Russian Art and Culture

Russ 3512 Russian Art and Culture
A-F only, 3 credit(s); Advanced Russian major
Credit will not be granted if credit has been received for: RUSS 3312
Instructor: STAFF
Description: This 3-credit course is designed for and required of all students majoring in Russian, except for Honors students (see Russ 3311 H). 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.

Style: 25% Discussion. guided research
Grading: 100% other evaluation. finished research paper

Lit: Middle Ages to Dostoevsky in Translation

Russ 3421 Literature: Middle Ages to Dostoevsky in Translation
3 credit(s); Credit will not be granted if credit has been received for: RUSS 5421; Meets CLE req of Global Perspectives; meets CLE req of Literature
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 3512 Russian Art and Culture

Russ 3512 Russian Art and Culture
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives
Instructor: Walter, Ronald F.
Description: The general purpose of the course is to develop a broad understanding of some of the principle concepts of culture: history, art, music, religion, philosophy, folklore - as they pertain to Russia, with a view toward being able to converse and write generally but cogently about Russian culture. Students will view a goodly amount of visual material, and classes will be conducted through discussions and lectures on assigned texts as well. There will be two exams - a midterm and a final. Both will consist of essays (with topics given out in advance) on topics covered in class. The final exam will be similar in format to the midterm, but based on the material of the second half of the course. Students may also write a research paper (7-8 pages) on a personally selected topic of Russian culture, in which case the paper will be weighted into the grade, the better the paper the more the weight. Information on the paper will be handed out in class. The paper, if written,
is due at the final class session. Book review essay: The book to be reviewed is From Nyet to Da, and the essay is due at the midterm session October 20. Your essay should be at least two pages typed and double-spaced, though it may be longer if you wish. Your essay should include a brief summary of the contents and a critique of the book discussing its relative strengths and weaknesses. Here are some questions to consider: Is the material well organized and clearly presented? What can you say about the book’s language and style? What did you like most and least about the book? How useful do you think it is to the student of Russian culture? Online research project (second half of the course): The purpose of this project is to acquaint you with current news coverage in Russia in comparison with comparable coverage in the US. Use the websites of the Moscow Times (themoscowtimes.com) and/or the St. Petersburg Times (sptimes.ru), and compare them with coverage in the New York Times (nytimes.com) and/or the Washington Post (washingtonpost.com, or perhaps the Washington Times (washingtontimes.com). On the last day of class turn in an essay of about two pages (typed and double-spaced) on one or more of the following topics: 1) Do you see a difference in the news coverage of the Russian papers as opposed to the US papers? If yes, describe. 2) In what ways does the Russian approach to news differ from the American one? Do you see differences in style, language, choice of topics, etc.? 3) Find a specific international event which is covered both in the Russian press and the U.S. press and see if you can compare and contrast the approaches. 4) Find a topic related to some aspect of Russian culture that is of particular interest to you and relate how that topic is handled in the Russian press.

Russ 3900 Topics in Russian Language, Literature, and Culture
1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Russ 3993 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 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;
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 studentCredit will not be granted if credit has been received for: RUSS 1101;
Instructor: Walter,Ronald F.
Description:

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;
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: Schweikert,Maria S
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. 70% recitation and interactive oral activities.
Grading: 25% final exam, 70% quizzes, 5% attendance.
Exam Format: Fill in; translation to Russian; open-ended response.
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: 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. 70% recitation and interactive oral activities.
Grading: 60% quizzes, 20% written homework. 20% class participation and oral presentations.
Exam Format: Fill in; translation to Russian; open-ended response.

Russ 4111 Advanced Russian I
2 credit(s), max credits 4, 1 completion allowed; 3002 or 4104 or instr consent Credit will not be granted if credit has been received for: RUSS 3101;
Instructor: Schweikert, Maria S
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 5900 Topics in Russian Language, Literature, and Culture
2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Schweikert, Maria S
Description: Student may contact the instructor or department for information.

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 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.

Scan 3502 Scandinavian Myths

3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Liberman, Anatoly
Description: Although less known to the general public than tales from Ancient Greece and Rome, the tales that have come down to us from Medieval Scandinavia are as interesting and important as those. We will read two main sourcebooks of Scandinavian mythology, known as the Elder Edda (the first half) and the Younger Edda (most of it); a textbook will supplement the main texts. The course will introduce the students to the body of the only ancient myths extant in the Germanic-speaking world and to the foundations of mythological thinking. The original language of the Scandinavian myths is Old Icelandic, but all the reading will be in English. Lectures (the main medium of this course) will alternate with discussion. There will be a take-home midterm and a take-home final based on the material of the lectures and the textbook (essay questions in both); also a paper, about five pages long, will be required. The course spans the areas of mythology, religion, literature, and cultural anthropology. No prerequisites.
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 40% final exam, 40% reports/papers.
Exam Format: Essay.

Scan 3504 The Immigrant Experience

3 credit(s); Meets CLE req of Historical Perspectives
Instructor: Norrman, Lena Elisabeth
Description: Scan 3504 THE IMMIGRANT EXPERIENCE: America then, Scandinavia now? In this course we will examine a body of experiences related to the process of immigration among the Danes, Finns, Norwegians, Icelanders, and Swedes. We will deal with issues of origins and language, immigration and settlement traditions and values, culture and politics. The crossing of boundaries from the old to the new are studied from a variety of sources - letters, diary entries, photographs, songs, stories, and novels. Writings from within these groups illustrate the implicit codes and norms that pertain to an immigrant culture. In looking at academic texts we will examine how history can be set down in a formal way, but we will also discuss ways in which real-life experiences bring about a sense of belonging. We will also look at how immigration to contemporary Scandinavia has influenced culture and political discourse. Readings in English.

Scan 3605 The Scandinavian Short Story

3 credit(s); Credit will not be granted if credit has been received for: SCAN 5605; Meets CLE req of Literature
Instructor: Houe, Poul
Description: The course will examine 35[+] of the best short stories written in the five Scandinavian countries, Denmark, Finland, Iceland, Norway, and Sweden within the last 200 years. The Scandinavian short story represents a large variety of styles and attitudes ranging from early 19th century Romantic tales to late 20th century absurdist pieces but it is typically written in the realistic-psychological or the fantastical-imaginative mode. In recent years, the genre has expanded and virtually exploded in many directions. Still, the principal concern of the Scandinavian short story is with characters who desperately try to plan their lives and control their future, but whose efforts are usually in vain. Discussions will focus on individual stories, but attention will also be given to societal and historical background, relations to other narrative genres and to the cultural contexts which inform today’s short story readers and their expectations. As individual stories reflect and critique prevailing norms and values, the course will consider the short story as a window on Scandinavia: on its nature, culture and society; on its relative homogeneity and remarkable diversity. Film adaptations of selected short stories will be shown on video in connection with readings for the course. Critical essays on the short story genre and particular stories will be included as secondary source materials. Readings in English for undergraduate majors and non-majors. Readings include stories by: H. C. Andersen, Blicher, Bang, J. V. Jensen, Blixen, B. Andersen, H?eg (Denmark); Runeberg, Topelius, (Finland); Vilhjalmsson, Jacobsdottir (Iceland); Bj?rnumson, Kielland, Skram, Lie, Garborg, Hamsun, Sandemose, Vesaas, Solstad (Norway); Strindberg, Soderberg, Lagerlof, Lagerkvist, Dagerman, Sundman, Lindgren (Sweden)
Style: 30% Lecture, 10% Film/Video, 60% Discussion. Discussion time includes brief student presentations.
Grading: 25% final exam, 50% reports/papers, 15% in-class presentation, 10% class participation.
Exam Format: take home essay exam.

Scan 3993 Directed Studies

1-4 credit(s), max credits 12, 12 completions allowed;
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: 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.

Scan 4614 Introduction to Kierkegaard
3 credit(s);
Instructor: Houe, Poul
Description: The Danish philosopher Soren Kierkegaard (1813-55) was one of the most original thinkers and writers of the 19th century. Deeply indebted to Christian Scriptures but also to philosophical writings from Plato to Hegel, he assaulted traditional Western philosophy and the social and religious smugness of his time. Probing the question: What does it mean to be(come) a fully human being, Kierkegaard made a compelling case for the personal and subjective and paved the way for the literary and philosophical movement of Existentialism. He became one of the dominant cultural forces of the 20th century, and in the 21st century his influence seems unabated; his 200th birthday will be celebrated worldwide this year.
This course is an introduction to Kierkegaard as a literary, philosophical, psychological, social, and Christian writer. It relates his work to the Golden Age of early to mid-19th century Denmark and outlines his later influence upon 19th-21st century thinkers and writers worldwide. His controversy with speculative reason and institutionalized religion will be explored in eloquent texts that are of particular interest to today's readers. Attention to the dialectical and poetic dimensions of Kierkegaard's oeuvres is key to an understanding of his concerns. When he communicated his uncompromising ideas indirectly—under the guise of pseudonymity, irony, and other artistic devices—it was to entice each of his readers to undertake a personal search for existential and religious truth. Far from advocating an anti-social stance, Kierkegaard wished to counter what has been called "the self-interested individualism of modern civil society." Class format will be lectures and discussions, and students will write two term papers and a final essay/take-home exam.
Style: 40% Lecture, 60% Discussion. Discussion time includes brief student presentations
Grading: 30% final exam, 50% reports/papers, 10% in-class presentation, 10% class participation.
Exam Format: Essay/take-home exam

Scan 5605 The Scandinavian Short Story
3 credit(s); Credit will not be granted if credit has been received for: SCAN 3605;
Instructor: Houe, Poul
Description: The course will examine 35[+] of the best short stories written in the five Scandinavian countries, Denmark, Finland, Iceland, Norway, and Sweden within the last 200 years. The Scandinavian short story represents a large variety of styles and attitudes ranging from early 19th century Romantic tales to late 20th century absurdist pieces, but it is typically written in the realistic-psychological or the fantastical-imaginative mode. In recent years, the genre has expanded and virtually exploded in many directions. Still, the principal concern of the Scandinavian short story is with characters who desperately try to plan their lives and control their future, but whose efforts are usually in vain. Discussions will focus on individual stories, but attention will also be given to societal and historical background, relations to other narrative genres and to the cultural contexts which inform today's short story readers and their expectations. As individual stories reflect and critique prevailing norms and values, the course will consider the short story as a window on Scandinavia: on its nature, culture and society; on its relative homogeneity and remarkable diversity. Film adaptations of selected short stories will be shown on video in connection with readings for the course. Critical essays on the short story genre and particular stories will be included as secondary source materials. Readings in English for undergraduate majors and non-majors. Readings include stories by: H. C. Andersen, Blicher, Bang, J. V. Jensen, Blixen, B. Andersen, H?eg (Denmark); Runeberg, Topelius, (Finland); Vilhjalmsdottir, Jacobsdottir (Iceland); Bj?rnsen, Kielland, Skram, Lie, Garborg, Hamsun, Sandemose, Vesaas, Solstad (Norway); Strindberg, Soderberg, Lagerlof, Lagerkvist, Dagerman, Sundman, Lindgren (Sweden).
Scan 5701 Old Norse Language and Literature
3 credit(s);
Instructor: Liberman, Anatoly
Description: Old Norse is like any other language course, with the difference that students are not taught to write or speak the language. In Old Norse (mainly in Old Icelandic) some of the greatest stories and poems of the Middle Ages were recorded. At the end of the year, students will be able to read the sagas, even if slowly and with a dictionary. One semester will give sufficient exposure to those who want to read Old Icelandic on their own, but security will come only in spring. The book to be used is E. V. Gordon's An Introduction to Old Norse. Those who will stay for both semesters will learn a good deal about one of the main Old Germanic languages and about some of the most memorable literatures preserved in Germanic. There will be day to day reading assignments: first very short, in the second semester between two and three pages a week. In the Fall Semester, there will be a midterm and a final. The grade will depend on class participation (40%: regular attendance is crucial), the results of the midterm (25%) and final (35%).

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: Wentzcovitch, Renata M
Description: Supercomputing Research (SciC8190) - Simulations in Materials, Chemistry, and Biology (1 credit)
Description: Simulations of materials, nano-structures, molecular, and biological systems are a fundamental research approach that has infiltrated virtually all fields of chemical and materials sciences. This seminar series will offer an overview of quantum chemistry calculations and atomistic simulations from materials science to biology and their applications to a broad range of interdisciplinary problems. We hope it will cross fertilize theoretical and computational inter-departmental research on campus by bringing together the faculty involved in related research areas. Experimentalists will also be occasionally invited to stimulate computational research. The vast majority of seminar speakers are UMN based researchers. It consists of one hour seminars once a week. Organizer: Renata M. Wentzcovitch Office: 284 Amundson Hall Email: wentz002@umn.edu Phone: (612) 625-6345 Time: Wednesday 3:30 to 4:30 pm Location: Walter 405 (exceptions will be posted)

SciC 8594 Scientific Computation Directed Research
1-4 credit(s), max credits 9, 9 completions allowed;
Instructor: Yuen, David A
Description: Student may contact the instructor or department for information.

Security Technologies 290 McNamara Center

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: Kelley,Steve
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: Kennedy,Shaun
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.

ST 8660 Independent Study
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Amin,Massoud
Description: Student may contact the instructor or department for information.

Social Work 105 Peters Hall

SW 1905 Freshman Seminar: Images of Youth
1-3 credit(s), max credits 6;
Instructor: Baizerman,Michael Leon
Description: Student may contact the instructor or department for information.

SW 2501W Introduction to Social Justice
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Karcher-Ramos,Muneer
Description: Student may contact the instructor or department for information.

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: 10% 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 content of 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: Gilgun,Jane F
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 5101 Historical Origins and Contemporary Policies and Programs in Social Welfare
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Morrissey,Megan Harrison
Description: Student may contact the instructor or department for information.

SW 5562 Global Social Work and Social Development
SW 5903 Substance Abuse and Social Work
2 credit(s);
Instructor: Dimock, Peter Trier
Description: This course is a broad survey of practice areas where knowledge of substance abuse and dependence are critical. Topics covered: *The role of SA in domestic violence *Adolescent brain development and SA *Families and SA *FAS, FAE, and other developmental effects of substance use *Screening, assessment and diagnosis *Older adults and SA *Co-occurring disorders *Neurobiology *Gambling and other compulsive disorders A number of guest lecturers who work in these areas as well as the instructor provide knowledge and practice information. These guest sessions are delivered online during the designated course time, and students may participate from any location where they have access to a computer and a high speed internet connection. Other sessions are attended in the classroom.
Style: 20% Lecture, 20% Film/Video, 10% Discussion, 10% Student Presentation, 10% Demonstration, 30% Web Based.
Grading: 50% reports/papers, 20% special projects, 15% quizzes, 5% attendance, 10% in-class presentation.

SW 5907 School Social Work
1 credit(s);
Instructor: Lowry, Kathleen Mary
Description: Student may contact the instructor or department for information.

SW 5912 Grief & Loss in Social Work Practice
1 credit(s);
Instructor: Remke, Stacy S
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, Stephen
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: Mendez, Melissa Ann Batalden
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 Mae
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: Jones, Linda E
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, Stephen
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: Mendez, Melissa Ann Batalden
- 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 Mae
- 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: Nissly, Katie
- 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, Stephen
- 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: Mendez, Melissa Ann Batalden
- 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 Mae
- 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: Jones, Linda E
- 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 8151 Social Work Methods: Practice With Individuals and Systems
- A-F only, 2 credit(s);
- Instructor: Krentzman PhD, Amy R.
- 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: Renner, Lynette Michelle
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: Gilgun, Jane F
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: Henke, Lindsey Marie-Fritsch
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: Sugrue, Erin Patricia
Description: Student may contact the instructor or department for information.

SW 8154 Organizations and Policy Advocacy
A-F only, 1 credit(s);
Instructor: Reinardy, James Robert
Description: Student may contact the instructor or department for information.

SW 8154 Organizations and Policy Advocacy
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, 3 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, 3 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, 3 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, 3 credit(s);
Instructor: Zuel, Timothy Brett
Description: Student may contact the instructor or department for information.

SW 8351 Advanced Practice I: Families and Children
A-F only, 3 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, 3 credit(s);
Instructor: Hoy, Judith M
Description: Student may contact the instructor or department for information.

SW 8361 Identification and Assessment of Family Violence
A-F only, 3 credit(s);
Instructor: Obinna, Jennifer
Description: Student may contact the instructor or department for information.

SW 8451 Assessment and Engagement in Clinical Social Work Practice
A-F only, 3 credit(s);
Instructor: Lewis-Dmello, Angela Kate
Description: Student may contact the instructor or department for information.

SW 8451 Assessment and Engagement in Clinical Social Work Practice
A-F only, 3 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, 3 credit(s);
Instructor: Shannon, Patricia Jean
Description: Student may contact the instructor or department for information.

SW 8452 Core Concepts in Clinical Social Work Practice
A-F only, 3 credit(s);
Instructor: Caruso, Beverly Jean
Description: Student may contact the instructor or department for information.

SW 8461 Advanced Clinical Social Work Practice with Adults
A-F only, 3 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, 3 credit(s);
Instructor: Gearity PhD, Anne R
Description: Student may contact the instructor or department for information.

SW 8552 Advanced Community Practice: Leadership, Planning, and Program Development
A-F only, 3 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, 3 credit(s);
Instructor: Cain, Therese 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: 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: Sugrue,Erin Patricia  
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: Harrison,Mary 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: Merighi,Joseph Richard  
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: Krentzman PhD,Amy R.  
Description: Student may contact the instructor or department for information.

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.

SW 8902 Social Work Supervision, Consultation, and Leadership  
2 credit(s);  
Instructor: Stiber,Jill M  
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 5610 Pharmacoepidemiology  
A-F only, 2 credit(s), max credits 3, 1 completion allowed;  
Instructor: St Peter,Wendy L  
Description: Student may contact the instructor or department for information.

SAPh 8054 Advanced Studies in Pharmaceutical Care Practice  
A-F only, 3 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: Schommer, Jon C
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.

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**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 Diversity and Soc Justice US; 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

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**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 Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Brightman Cox, Vania
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. Throughout this semester, we will consider the dynamic relationship between what it means to be an individual while simultaneously also being a member of society. The reading consists of a textbook, which will allow the class to cover a variety of sociological approaches and content. In class we will contextualize our reading of the text with film/documentaries and other supplementary readings/experiences. The primary goal of these explorations is to become well versed in basic sociological concepts and ideas while also developing tools that allow us to approach the social world and social research with a critical lens.
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 Diversity and Soc Justice US; 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: 25% final exam, 40% reports/papers, 10% attendance, 15% 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 Diversity and Soc Justice US; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Pellow, David
Description: This course emphasizes the scholarly study of human societies, social behavior, and institutions with an emphasis on understanding the world around us and how ordinary people can affect change. The course will focus on sociology theories, concepts, methods, and research findings.
Style: 70% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities.
Grading: 20% mid exam, 30% final exam, 10% quizzes, 10% attendance, 20% reflection paper, 10% class participation.
Exam Format: A mixture of short answer questions, matching, and essay.

Soc 1571 Introduction to 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: Religion in America
A-F only, 3 credit(s);
Instructor: Edgell, Penny A
Description: According to the General Social Survey, 97% of Americans believe in God, and 60% say they have no doubts, making us unique among Western industrialized countries. Religion is an important part of private life for many Americans, and it has a strong public presence as well. But an increasing number of younger Americans forego religious involvement and are critical of religious institutions; fully 30% of Americans under the age of 35 claim no religious identity, most because they are critical of or distant from "organized religion." The central, organizing question of this class is, "Why does religion matter in American life, and how is that likely to change?" Using a sociological lens, we will examine the social influence of religion. In particular, we will focus on: how religion shapes ethics and understandings of "the good life" and "the good society"; religious influences on family life, gender roles, and sexuality; how religion shapes attitudes toward racial inequality; religious social movements; and religious influences on voting and political mobilization. This course highlights the diversity of American religion, including the emerging importance of discourses about spirituality; we also focus on the changes brought about by younger generations.
Style: 30% Lecture, 10% Film/Video, 40% Discussion, 20% Small Group Activities.
Grading: 25% final exam, 40% reports/papers, 10% attendance, 15% in-class presentation, 10% class participation.

Soc 3101 Introduction to the 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: An 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) and the illegal criteria (race, ethnicity) 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

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**Soc 3101 Introduction to the Criminal Justice System**

A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences

**Instructor:** Phelps, Michelle Suzanne

**Description:** The goal of this course is to develop an introduction to the criminal justice system in the United States. We will critically examine the components, dynamics, and effects of policing, criminal courts, jails, prisons, and parole. Throughout the course, we focus on sociological understandings of these processes, with particular attention to ethnic, racial, class, and gender inequality; political and economic change; and popular representations of crime and criminals. The course meets the Liberal Education requirements of Civil Life and Ethics and the Social Science Core. Courses with these designations are carefully designed to address the components, dynamics, and philosophical underpinnings of criminal justice through the Liberal Education critical framework.

**Style:** 70% Lecture, 15% Film/Video, 10% Discussion, 5% Guest Speakers.

**Grading:** 25% final exam. 75% three exams (25% each)

**Exam Format:** Three multiple choice and short answer exams, and one final take-home short essay exam

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**Soc 3102 Introduction to Criminal Behavior and Social Control**

3 credit(s);

**Instructor:** Barrows, Julie Sue

**Description:** What is crime? What is the extent and nature of crime in the U.S.? How do sociological theories help us understand criminal offending? How do we attempt to control crime? Do these efforts work? In this course, students will evaluate crime, criminal behavior and responses to crime from a sociological perspective. Emphasis is placed on how sociological theories and research impact criminal justice policy.

**Style:** 50% Lecture, 30% Discussion. small groups

**Grading:** 30% mid exam, 30% final exam, 30% reports/papers, 10% quizzes.

**Exam Format:** multiple choice, short answer and essay

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**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:** Logan, Enid

**Description:** This course is designed to provide you with an understanding of the contours of race in the post-civil rights era United States. Our goal is to examine the myriad ways that race structures American society and influences the experiences and life chances of all its members. In the opening sections of the class, we study definitions of race and major theories of how race and racism work in the contemporary U.S. The next unit begins with an overview of the concept of racial identity, and asks how social location impacts one’s identity and daily interactions. After inquiring into the general process of identity formation, we look at the specific experiences of whites, African Americans, Asian Americans, Latinos, Native Americans, and multiracial Americans. Though our central focus is on race relations in today's society, we also provide a historical overview of the experiences of each group in order to help explain their present-day social status. The next part of the course examines the significance of race in several specific contexts. We look at controversies over race and immigration, race and education, and race and popular culture. We close the class by considering the future of race relations in the U.S., and evaluating remedies to racial inequality.

**Style:** 40% Lecture, 10% Film/Video, 50% Discussion.

**Grading:** 20% final exam, 60% reports/papers, 20% class participation.

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**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:** Logan, Enid

**Description:** In this course, we examine race, class and gender as bases of identity, stratification, and inequality. We explore the social construction of our core concepts in the contemporary U.S., asking how they shape each of our lives,
life-chances, and daily interactions. We will divide our time between lecture, small and large group discussion, and viewing segments of documentary films. This is a writing-intensive course, and students will be expected to do a good deal of formal and informal writing. Active participation in discussion and engagement with the ideas is a must. In this class, you will connect the concepts drawn from the materials to your own life experiences and thoughts about the world, and learn from the experiences and thoughts of others. In the first weeks of the class, we examine the social construction of Race, Class, Gender and Sexuality in American society. We then move to look at the workings of these concepts in different interpersonal and institutional settings. These include the Labor Force, Schools, the Family, the Criminal Justice System, understanding Violence, and the politics of Language. In the last week of the class we discuss individual and corporate approaches to overcoming injustice.

**Style:** 30% Lecture, 20% Film/Video, 50% Discussion.

**Grading:** 20% final exam, 60% reports/papers, 20% class participation.

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**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:** Park, Lisa Sun-Hee

**Description:** Understanding the social significance of race, class, and gender is pivotal to understanding society itself. These social constructions organize our everyday lives and, their implications?both independently and in relation to each other?are far-reaching for everyone. And, as constructions, these dynamic social categories require constant maintenance. This course will explore the roles and functions of these categories, how we maintain them, and their larger implications. To achieve this objective, strong critical thinking and writing skills are required. Critical analysis goes beyond mere summary of someone else's idea; it requires an additional level of inquiry based upon a synthesis of multiple perspectives and a deeper reading of the central concepts. Regardless of your current and future interests, the capacity to critically analyze a complex phenomenon and powerfully articulate your idea in written form is indispensable. As a writing-intensive course, the assignments and exams for this course are intended to develop and strengthen your ability to clearly and concisely articulate an original argument with convincing supporting evidence.

**Grading:** 20% mid exam, 20% final exam, 30% reports/papers, 20% special projects, 10% in-class presentation.

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**Soc 3301W Politics and Society**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Broadbent, Jeffrey Praed

**Description:** Politics and society go together like a horse and carriage, but its hard to tell which is the horse and which the carriage! This course approaches politics from the standpoint of society. Accordingly, it does not focus on the details of the formal political institutions such as voting, legislatures or the presidency. Rather, it focuses on how society organizes around and pushes political questions. For instance, society is divided by social categories such as race, class, gender, age, education, religion, associational membership, wealth. The systemic relations among these categories, equal or unequal, exploitative or cooperative, and so forth, determine the allocation of "goods" and "bads" in society, and therefore many political dynamics. In addition, people and groups have different levels of social capital (connections) and cultural capital (for instance, levels of education and tastes about music, theater, literature, news, sports and alcohol). These different factors help create ideological values such as group and nationalist beliefs. They bear upon how individuals and groups think about the issues that face them and how they do or do not translate these into political issues demanding governmental action. These social factors interact with the type of local and national regime and its placement in global systems to channel conflicts and outcomes. Depending on the openness of the regime, popular pressures can lead to peaceful democratic change, open protests, or revolution. The course explores these issues from the perspective of three case studies: one case of severe ethnic conflicts in a giant democracy (India), one case of revolution against dictatorship (the Arab Spring) -- and within that, the role of the internet communications in popular mobilization and what it presages for the future--; and one case about welfare politics in a conservative capitalist democracy (the US--the politics of the recent Affordable Care Act).

**Style:** 60% Lecture, 40% Discussion.

**Grading:** 15% mid exam, 15% final exam, 45% reports/papers, 5% quizzes, 18% written homework, 2% class participation.

**Exam Format:** essay

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**Soc 3505 Transnational Migration: Networks of People and Places**

A-F only, 3 credit(s); Soc majors/minors must register A-F

Credit will not be granted if credit has been received for:

GLOS 3705;

**Instructor:** Abdi, Cawo

**Description:** How is transnationalism or cross border social and economic relations maintained and perpetuated? How are these relations affecting identity? How is current transnationalism different from earlier migration? Is this gendered, and if so, how and why? The objective of this course is to explore these questions through theoretical and case study based literature on the subject. The first part of the course provides a historical overview on migration over the last two centuries. The second section centralizes identity in terms of transnational or dispersed communities. The aim of this section is to introduce the complex web of culture, agency and structure in play when dealing with migration. The third section presents

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case studies on the social and economic relations of transnational communities. The nature of family connections across borders and the economic ties of those who migrated with their families in the home country is discussed. The role of gender in these relations is also explored. The final section of the course deals with the role of the nation-state in transnational migration.

**Style:** 50% Lecture, 20% Film/Video, 30% Discussion.

**Grading:** 30% mid exam, 30% final exam, 30% written homework, 10% class participation.

### Soc 3511 World Population Problems

**3 credit(s); Soc majors/minors must register A-F Credit will not be granted if credit has been received for: SOC 5511; Meets CLE req of Global Perspectives**

**Instructor:** DeWaard, Jack

**Description:** This course explores world population issues and potential problems in global perspective, and is organized around a central theme, namely - whether there are (or eventually will be) too many people alive for the Earth to support. The world's population is currently more than 7 billion persons, and is expected to reach upward of 9 billion persons by the year 2050. In this course, students will learn key population theories and measures to understand the causes and consequences of this population growth. Along the way, this will require in-depth examination of such demographic processes as mortality, fertility, migration, population aging, and the environment. Particular emphasis will be placed on exploring these processes in global perspective, with additional attention given to regional differentiation, primarily by comparing less- and more-developed countries. Key population-level theories, concepts, trends, and policies will be discussed.

**Style:** 75% Lecture, 25% Discussion.

**Exam Format:** Quiz Format: multiple choice, Exam Format: short answer, essay

### Soc 3613W Food, Culture, and Society

**A-F only, 3 credit(s); Soc majors/minors must register A-F Credit will not be granted if credit has been received for: GLOS 3613W; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive**

**Instructor:** Cadieux, Kirsten Valentine

**Description:** Hamburgers and a Coke, rice and beans, collard greens, wonton soup, creme brulee What meanings and feelings do these foods conjure up, and for whom? Where are their key ingredients produced? Who prepares these dishes, and who eats them? This course is built on two key premises: first, that the production, distribution, and consumption of food involves relationships among different groups of people, and second, that one can gain great insights into these social relations and the societies in which they are embedded through a sociological analysis of food. Among the themes we will explore in this course are the different cultural and social meanings attached to food; food, culture and body image; the industrialization of agriculture; the global food system; work in the food sector; the debate over genetically modified food; and efforts to change the current food system.

### 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 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:** 70% Lecture, 10% Film/Video, 17% Discussion, 3% Student Presentation.

**Grading:** 20% mid exam, 20% final exam, 40% reports/papers, 15% written homework, 5% in-class presentation. Two mini-papers about the readings each about 3 to 4 pages in length. 25 answers (about 1/3 page in length) to reading questions for each class. They class will break up into 10 groups and each group will make one presentation about the readings.

**Exam Format:** The exams are designed to evaluate your mastery of the concepts and ideas covered by the readings, lectures and discussions. The questions will include short-answer and essay. The midterm exam is worth 150 points and the final exam is 250 points.

### Soc 3701 Social Theory

**A-F only, 4 credit(s);**

**Instructor:** Hull, Kathleen E

**Description:** This course provides an introductory overview of major social theories ranging from the foundational sociological theories of Marx, Weber and Durkheim to current theories of postmodernism and globalization. We will examine a range of theories with particular attention to their treatments of core sociological questions and concerns, including: What holds human societies together? How do societies reproduce themselves? What are the key sources of social conflict, and how are they resolved or contained? What are the significant features of modernity, and what are the implications of modernity for social life? How are social identities created, sustained or transformed, and to what effect?
Soc 3801 Sociological Research Methods

4 credit(s);
Instructor: saliba, jim

Description: We will explore ways of evaluating various forms of social research, including the formal research of social scientists, research in the everyday world around us, and our own (more or less formal) investigations of the social world. Our evaluations will consider the purposes, uses, and ethics of research, and the ways in which researchers engage with meaning, selection principles, and questions of "why." The central goal of this course is to explore and practice thinking critically and creatively about social research, thus becoming more reflective about accepting and using the research of others and about conducting our own investigations of the social world. Social research surrounds us: businesses try out marketing techniques; politicians test electoral strategies; government agencies investigate the efficacy of social programs; news media make claims about the who's, what's, when's, where's, and why's of social life. Thinking critically and creatively includes imagining and considering alternatives, identifying and questioning assumptions, and recognizing and investigating omissions. In support of this goal, we will practice evaluating the research of others (both more and less formal), and we will practice conducting our own research, including writing interview and survey questions and observing life and artifacts. Through this practice we will explore ways of thinking and practical tools that you will hopefully find useful not only for completing your senior major project, but also in your future work and life as a member of society. /// This course is divided into lecture and section, but this distinction will be far from absolute. Lecture periods will generally include lecture components, but these components will be interspersed with small group work using active learning exercises and case studies. /// ABOUT THE INSTRUCTOR: jim saliba is a Ph.D. candidate in sociology at the University of Minnesota.

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, Debord, 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 3721 Principles of Social Psychology

3 credit(s);
Instructor: DeMuth, Scott Ryan

Description: Social Psychology is at the intersections of macro and micro sociology. This course will be a general survey of theoretical and applied knowledge of social psychology from the self to the interpersonal to the societal. Topics will include three major sections: 1) selfhood and socialization, 2) interpersonal processes, such as conformity/deviance, gender roles, etc, and 3) social processes, which include group dynamics, group stratification, conflict, collective behavior, etc. Through exposure to real life settings and simulations, students will explore key questions such as "What attracts us to each other??, "How do we respond to deviant behavior?" and, "Why do we conform?" Additionally, we will be applying social psychological concepts to contemporary social problems.

Style: 30% Lecture, 10% Film/Video, 25% Discussion, 25% Small Group Activities, 10% Student Presentation.
Soc 4090 Topics in Sociology: Environmental Decision Making: Food Systems Focus

Grading:
Style:

Soc 3811 Basic Social Statistics

Grading:
Style:
Exam Format:

Soc 3801 Sociological Research Methods

Grading:
Style:
Exam Format:

Soc 4090 Topics in Sociology: Environmental Decision Making: Food Systems Focus

Grading:
Style:
Exam Format:

Instructor: DeWaard, Jack
Description: This course is an introductory guide for conducting empirically-based research in the social sciences in an effective and critical way. Although primary focus will be given to the ins and outs of different research methods, including both qualitative and quantitative methods, the course begins by considering the philosophical, conceptual, and ethical issues involved in conducting scientific research. After introducing these issues, we will turn to a set of careful and critical assessments of particular research methods, including experiments, secondary-data and survey research, evaluation and policy research, qualitative methods, comparative and historical methods, and other approaches. In the process, students will have the opportunity to develop three research proposals on a topic and method of interest to them. Students will likewise be introduced to two software packages for conducting quantitative and qualitative research.

Instructor: Bian, Yanjie
Description: This course will introduce sociology majors to basic statistical measures and procedures that are used to describe and analyze quantitative data in sociological research. The topics include (1) displays of frequency and percentage distributions, (2) measures of central tendency and dispersion, (3) measures of association and correlation, (4) bivariate regression, and (5) basics about probability and statistical inference. Lectures on these topics will be given in class meetings, and lab exercises are designed to help students learn statistical skills needed to analyze quantitative data provided in the class. In addition to attendance to lectures and labs, students are expected to read 15-20 pages of the text per week. There will be a midterm exam and a final exam. Students will need a calculation for assignments and exams.

Instructor: Cadieux, Kirsten Valentine
Description: How do people comprehend, shape, and manage food environments? How do people decide which dynamics of food controversies are important -- and worthy of study and activism? How do scholars identify and apply appropriate analytic frameworks to illuminate the intertwined nature of social and environmental systems? This research seminar uses a platform of interdisciplinary environmental psychology and other social science approaches to explore ways that people experience environments and make decisions about them, both as individuals and also in the social contexts where environmental decision making is institutionalized. Choosing a project appropriate to their interests and skills, students will develop, research, and engage salient public audiences in exploring questions about everyday experience in environments, particularly environments relevant to food systems (although participants with broader environmental interests are also welcome). We will use case studies at different scales to explore a range of environmental decision challenges from the everyday experience of our immediate environments to the distant, abstract, global environment writ large, for example, in the need to address climate change and changing demands for food in processes for governing environments. Projects planned for the class relate to food system decision making in local projects (such as: a student-driven project to evaluate the values embodied in University Dining Services procurement strategies; an NGO-organized project to negotiate and institutionalize a comprehensive set of food justice principles; and a state-wide project organized in collaboration with Cooperative Extension to develop community food networks), and will also include other student interests and projects students bring to or develop in class. This course will meet in conjunction with cross-food-system events planned by the 2013-2014 Institute for Advanced Study Agri-Food Collaborative, focused on building capacity to discuss difficult topics across disparate perspectives on the food system, and on building knowledge infrastructure for representing these discussions in different ways. Engaging with environmental decision projects underway around the university and state, students will have the opportunity to consider the challenges involved in using diverse knowledge systems to understand and manage socio-environmental dynamics.

Instructor: Jim Crooks
Description: Jim's research investigates political influences on educational equity. At Minnesota, Jim has examined voter support for school funding, done fieldwork at school board meetings, and helped develop demographic data for school attendance areas and state-level measures of grade retention. Before coming to Minnesota, Jim studied and taught poetry in June Jordan's Poetry for the People program at the University of California, Berkeley, constructed experimental performance pieces in San Francisco, and developed software for a major bank. Jim's dissertation-in-progress investigates the influence of governance structure changes on K-12 educational opportunity in the United States.

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response essays; 21%: 3 community engagement exercises; 20%: participation (including some class facilitation); 35%: Term project in 4 stages: (proposal 5%, source summary 10%, presentation 10%, project report 10%)

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 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 4141 Juvenile Delinquency
A-F only, 3 credit(s); [3101 or 3102 or 3111 or instr consent], soc majors/minors must register A-F Credit will not be granted if credit has been received for: SOC 4141H;
Instructor: Uggen, Christopher
Description: This course presents an overview of sociological theory and research on juvenile delinquency. We start with a critical examination of the social facts surrounding the measurement, extent, and distribution of delinquency. Next we study some of the principal sociological explanations of delinquent behavior. These theories provide conceptual tools for analyzing monographs detailing delinquency among diverse groups of young people. We conclude by analyzing some of the key programs implemented in attempts to reduce delinquency. Course objectives: 1) To understand the way that delinquency is currently measured and the extent and distribution of delinquent behavior according to these measures; 2) To gain a working knowledge of the major sociological theories used to explain delinquency; 3) To apply the conceptual tools of these theories to selected case studies; and, 4) To critically evaluate concrete policy responses to delinquency.
Style: 50% Lecture, 5% Film/Video, 30% Discussion, 5% Small Group Activities, 5% Field Trips, 5% Web Based.
Grading: 25% mid exam, 30% final exam, 25% reports/papers, 10% special projects, 10% class participation.
Exam Format: Mixed

Soc 4141H Honors: Juvenile Delinquency
A-F only, 3 credit(s); honors student, [3101 or 3102 or instr consent], soc majors/minors must register A-F Credit will not be granted if credit has been received for: SOC 4141H;
Instructor: Uggen, Christopher
Description: This course presents an overview of sociological theory and research on juvenile delinquency. We start with a critical examination of the social facts surrounding the measurement, extent, and distribution of delinquency. Next we study some of the principal sociological explanations of delinquent behavior. These theories provide conceptual tools for analyzing monographs detailing delinquency among diverse groups of young people. We conclude by analyzing some of the key programs implemented in attempts to reduce delinquency. Course objectives: 1) To understand the way that delinquency is currently measured and the extent and distribution of delinquent behavior according to these measures; 2) To gain a working knowledge of the major sociological theories used to explain delinquency; 3) To apply the conceptual tools of these theories to selected case studies; and, 4) To critically evaluate concrete policy responses to delinquency. Honors students are expected to demonstrate greater depth of discussion, depth and to a degree length of writing assignments, presentations, and leadership of the students.
Style: 50% Lecture, 5% Film/Video, 30% Discussion, 5% Small Group Activities, 5% Field Trips, 5% Web Based. Media
Grading: 25% mid exam, 30% final exam, 25% reports/papers, 10% special projects, 10% class participation.
Exam Format: Mixed

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: 85% 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 4246 Sociology of Health and Illness
A-F only, 3 credit(s);
Instructor: Fischer, Laura L
Description: The Sociology of Health and Illness, or Medical Sociology, seeks to understand issues of health and illness in social, political, economic, and cultural contexts. In this course we will explore these contexts, as well as ethics, theory and structure of medicine. We will consider medical experiences at the individual level as well as the group and structural levels. We will ask important questions about medicine, about practitioners, about patients and families. Why do some groups of people experience the medical system differently than others? What are the systematic differences in illness and outcomes among groups of people in society? How has medicine changed over time? How does the health care system function in the U.S.? How does health care function throughout the world? How is the health care system organized? What is the role of public health? This course presents an overview of Medical Sociology in primarily a lecture format, but will also utilize films, class exercises, and class discussions.

Soc 4309 Religion in American Public Life: Culture, Politics, & Communities
3 credit(s); Soc majors/minors must register A-F Credit will not be granted if credit has been received for: RELS 4309; Meets CLE req of Civic Life and Ethics
Instructor: Edgell, Penny A
Description: This course will focus on the "public face" of religion in the U.S. When it comes to belief, identity, and belonging, the American religious landscape is one of diversity? and increasingly rapid change. The post-1965 wave of immigration has increased the number and visibility of new religious groups in the United States. And Americans under the age of 35 are embracing religious practices and beliefs but not organized religion? fully 30% of younger generations claim no religious affiliation, a rapid and fundamental shift from their parents? generation. The purpose of this course is to help you understand contemporary American religion, in all its diversity and inter-generational differences, with a special focus on the public impact of religious groups and leaders. How does religion affect local communities, shape our political discourse, foster social movements, and influence national policies? We will explore the answers to these questions through examining sociological research on how religious groups engage in political action, foster particular understandings of democracy and styles of civic participation, influence volunteering, and shape individuals? views on issues such as race, poverty, science education, the family, and sexuality. Weekly student-led discussions will help you to use the insights of scholarly works to become more critical and educated readers of mass-media-based news about religion in our society. Civic life is comprised of voluntary, face-to-face arenas of activity that are not controlled by the state. Civic arenas are where citizens debate ethics, broadly conceived ? where ideas of ?the good society? are formed, debated, shared, and contested. The civic arena is diverse, with many types of secular and religious organizations. Through its role in civic life, religion is an important and visible arena for the construction of ethical discourse and understandings of the public (and the private) good. This course will help you develop a critical understanding of the ethical claims made by spokespersons for religious organizations, viewpoints, and movements, and assess the role that such claims have in shaping public discourse, legal outcomes, and policy outcomes. In a supportive environment, students will be prompted to consider their own religious and ethical beliefs in light of the range of such views in contemporary American society. The course emphasizes the diversity and variety of religious and political traditions in the United States, and that religious arenas are only one of many locations for the development of ethical discourse in American life. This course is open to majors and non-majors and fulfills the LibEd requirement for Civic Life and Ethics.
Style: 50% Lecture, 50% Discussion.
Grading: 25% mid exam, 25% final exam, 50% in-class presentation. In-class presentations are made to a small group (5 students); each presentation counts as 20% of your grade, and 10% is for attending group discussions of other members' presentations.
Exam Format: short answer and essay

Soc 4309H Honors: Religion in American Public Life - Culture, Politics, & Communities
A-F only, 3 credit(s); Honors Student, Soc majors/minors must register A-F Credit will not be granted if credit has been received for: SOC 4309; Meets CLE req of Civic Life and Ethics
Instructor: Edgell, Penny A  
Description: This course will focus on the "public face" of religion in the U.S. When it comes to belief, identity, and belonging, the American religious landscape is one of diversity?and increasingly rapid change. The post-1965 wave of immigration has increased the number and visibility of new religious groups in the United States. And Americans under the age of 35 are embracing religious practices and beliefs but not organized religion?fully 30% of younger generations claim no religious affiliation, a rapid and fundamental shift from their parents?generation. The purpose of this course is to help you understand contemporary American religion, in all its diversity and inter-generational differences, with a special focus on the public impact of religious groups and leaders. How does religion affect local communities, shape our political discourse, foster social movements, and influence national policies? We will explore the answers to these questions through examining sociological research on how religious groups engage in political action, foster particular understandings of democracy and styles of civic participation, influence volunteering, and shape individuals?views on issues such as race, poverty, science education, the family, and sexuality. Weekly student-led discussions will help you to use the insights of scholarly works to become more critical and educated readers of mass-media-based news about religion in our society. 
Civic life is comprised of voluntary, face-to-face arenas of activity that are not controlled by the state. Civic arenas are where citizens debate ethics, broadly conceived?where ideas of ?the good society? are formed, debated, shared, and contested. The civic arena is diverse, with many types of secular and religious organizations. Through its role in civic life, religion is an important and visible arena for the construction of ethical discourse and understandings of the public (and the private) good. This course will help you develop a critical understanding of the ethical claims made by spokespersons for religious organizations, viewpoints, and movements, and assess the role that such claims have in shaping public discourse, legal outcomes, and policy outcomes. In a supportive environment, students will be prompted to consider their own religious and ethical beliefs in light of the range of such views in contemporary American society. The course emphasizes the diversity and variety of religious and political traditions in the United States, and that religious arenas are only one of many locations for the development of ethical discourse in American life. This course is open to majors and non-majors and fulfills the LibEd requirement for Civic Life and Ethics. Honors students are expected to demonstrate greater depth of discussion, depth and to a degree length of writing assignments, presentations, and leadership of the students.
Style: 50% Lecture, 50% Discussion.
Grading: 25% mid exam, 25% final exam, 50% in-class presentation. In-class presentations are made to a small group (5 students); each presentation counts as 20% of your grade, and 10% is for attending group discussions of other members?presentations.
Exam Format: short answer and essay

Soc 4521 Love, Sex, & Marriage  
3 credit(s);[1001 or instr consent ], soc majors/minors must register A-F  
Credit will not be granted if credit has been received for: SOC 4521H;  
Instructor: Hull, Kathleen E  
Description: This course will provide an overview of sociological approaches to intimate human relationships. Specific topics we will cover include love and romance, dating and mate selection, sexuality, cohabitation, marriage, and divorce. The focus is on contemporary American society, but current U.S. practices are placed in historical and cross-cultural context. The goals for the course include: familiarizing you with social scientific approaches to the study of intimate human relationships and increasing your interest in the topic; challenging some of your taken-for-granted notions about what is "natural" or "normal" with regard to love, sexuality, and marriage; stimulating you to think about the impact of broad social forces (particularly the rise of modernity) on beliefs and practices related to intimate relationships; highlighting the salience of various social identities - including race/ethnicity, class, age, sexual orientation, and especially gender - to beliefs and practices around intimacy; and, introducing you to some of the significant current policy debates regarding intimate relationships, and fostering your ability to critically assess the arguments on all sides of these debates.
Style: 60% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities.
Grading: 40% mid exam, 30% final exam, 30% quizzes.
Exam Format: multiple choice, short answer, essay

Soc 4521H Honors: Love, Sex, & Marriage  
A-F only, 3 credit(s); Honors Student, [1001 or instr consent ], soc majors/minors must register A-F  
Credit will not be granted if credit has been received for: SOC 4521;  
Instructor: Hull, Kathleen E  
Description: This course will provide an overview of sociological approaches to intimate human relationships. Specific topics we will cover include love and romance, dating and mate selection, sexuality, cohabitation, marriage, and divorce. The focus is on contemporary American society, but current U.S. practices are placed in historical and cross-cultural context. The goals for the course include: familiarizing you with social scientific approaches to the study of intimate human relationships and increasing your interest in the topic; challenging some of your taken-for-granted notions about what is "natural" or "normal" with regard to love, sexuality, and marriage; stimulating you to think about the impact of broad social forces (particularly the rise of modernity) on beliefs and practices related to intimate relationships; highlighting the salience of various social identities - including race/ethnicity, class, age, sexual orientation, and especially gender - to beliefs and practices around intimacy; and, introducing you to some of the significant current policy debates regarding intimate relationships, and fostering your ability to critically assess the arguments on all sides of these debates. Honors students
are expected to demonstrate greater depth of discussion, depth and to a degree length of writing assignments,
presentations, and leadership of the students.

**Style:** 60% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities.

**Grading:** 40% mid exam, 30% final exam, 30% quizzes.

**Exam Format:** multiple choice, short answer, essay

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**Soc 4966W Major-Project Seminar**

A-F only, 4 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Hartmann PhD, Douglas

**Description:** This course is designed to provide you with an opportunity to reflect on what you have learned as a sociology major and to think ahead about how the knowledge, skills, and insights of the sociological enterprise can be used and applied in your lives and careers outside of the University. It is, in short, a capstone course. The focus is on how sociological knowledge, research, and thought help to promote critical thinking, effective communication, an appreciation of diversity and ambiguity, and social responsibility in public life. Specific topics include: the status of social scientific research and writing in politics and public policy implementation; the ways in which sociological thinking and research inform movements for social change; the presence (or absence) of sociological research and thought in popular culture and the mainstream American media; the day-to-day work of professional sociologists in the academy; the professions and careers where sociological methods and insights are most useful and prominent; and the utility and value of situating one's life and work in sociological perspective. This will all be situated in the context of the role of ideas, information, intellectuals, and experts in the complex, contemporary global world. Indeed, the larger intellectual goals of the course are to encourage you to think critically about your place in society and history, to reflect on the role of knowledge in the contemporary world, and to understand what skills and understandings you will take with you from your study of sociology to your future careers and lives beyond the academy.

**Style:** 25% Lecture, 10% Discussion, 25% Small Group Activities, 15% Guest Speakers, 25% Service Learning.

**Grading:** 50% reports/papers, 25% reflection paper, 25% class participation.

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**Soc 4977V Senior Honors Proseminar I**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Gerteis, Joseph Howard

**Description:** The Senior Honors Proseminar is designed to help students in the process of researching and writing the Honors Thesis in sociology. The first semester (“Proseminar I”) is dedicated to a set of interrelated goals: (1) thinking through the relationship between our personal biographies and our intellectual interests; (2) identifying and sharpening research topics and questions; (3) finding the relevant social scientific research, mastering it, and locating our interests in relation to it; (4) producing an initial research proposal; (5) considering and addressing the ethics of research concerning human subjects; and (6) finalizing a plan of research which will guide our research as we work toward the final paper. In the Spring semester (“Proseminar II”), we will be engaged in the process of collecting and analyzing data, polishing our written work into a full thesis paper, and presenting our work.

**Style:** 40% Discussion, 40% Small Group Activities, 20% Student Presentation.

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

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**Soc 5511 World Population Problems**

3 credit(s); Soc majors/minors must register A-F

Credit will not be granted if credit has been received for: SOC 3511;

**Instructor:** DeWaard, Jack

**Description:** This course explores world population issues and potential problems in global perspective, and is organized around a central theme, namely - whether there are (or eventually will be) too many people alive for the Earth to support. The world's population is currently more than 7 billion persons, and is expected to reach upward of 9 billion persons by the year 2050. In this course, students will learn key population theories and measures to understand the causes and consequences of this population growth. Along the way, this will require in-depth examination of such demographic processes as mortality, fertility, migration, population aging, and the environment. Particular emphasis will be placed on exploring these processes in global perspective, with additional attention given to regional differentiation, primarily by comparing less- and more-developed countries. Key population-level theories, concepts, trends, and policies will be discussed. Graduate students enrolled in the course will be assigned additional readings and be expected to write one additional 10-15 page paper in the form of a review and synthesis of a specific topic and area of research of interest to the student and in consultation with the instructor.

**Style:** 75% Lecture, 25% Discussion.

**Exam Format:** Quiz Format: multiple choice Exam Format: short answer, essay

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**Soc 5811 Intermediate Social Statistics**

4 credit(s);

**Instructor:** Bian, Yanjie

**Description:** This course is designed for the first-year sociology graduate students. After a review of study design, descriptive statistics, and bivariate analysis in the first five weeks, the rest of the class is devoted to regression models and
techniques. Grading is based on twelve weekly exercises, a midterm exam, and a term paper reporting a multiple regression analysis of social science data on a topic of student's own choice. Labs are organized to help students with the data analyses required to complete the weekly exercises and the term paper. Each student is to make a short, ungraded oral presentation of his or her term paper outline at the last class meeting of the semester. After taking this course, all students are expected to understand and to be able to evaluate statistical results up to the level of regression models as reported in major sociology journals today, and will be ready to take courses of advanced social statistics.

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

**Grading:** 25% mid exam, 25% reports/papers, 50% written homework.

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**Soc 8001 Sociology as a Profession**

*S-N only, 1 credit(s), max credits 2;*

**Instructor:** Gerteis, Joseph Howard

**Description:** This is the first part of a one-credit, two-semester seminar designed for first-year graduate students in Sociology. The seminar is designed to give you a chance to explore the "hidden curriculum" of graduate school. During the first semester, the seminar will focus on many practical matters of graduate school and professional life, as well as issues related to the development of a professional identity and purpose. To facilitate a student-centered focus, the seminar is designed to be open-ended, flexible, and interactive. That said, we do have a number of formal goals: (1) to provide practical information about sociology, academic life, and career goals; (2) to introduce resources and opportunities available in graduate school; (3) to provide a space to discuss presentations by students, faculty and job candidates in the department; (4) to foster an environment promoting creativity, a free exchange of ideas, and a place to ask questions and to form ideas about our work and our place in the discipline.

**Style:** 80% Discussion, 20% Guest Speakers. We will have everyone sign up to help with weekly preparation to help foster our discussion.

**Grading:** There are no readings, exams or other formal requirements. The only requirements are to (1) Be there each week; (2) participate; and (3) Be reflective and be yourself as honestly as you can.

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**Soc 8090 Topics in Sociology: Law & Society Review: Journal Editing Seminar**

*1.5 credit(s), max credits 6, 4 completions allowed;*

**Instructor:** Savelsberg, Joachim J

**Description:** This course is co-taught by Timothy R. Johnson (Political Science) and Joachim Savelsberg (Sociology), incoming editors of the Law & Society Review, the official journal of the Law & Society Association and the world's leading journal in the field of law and society studies. This is the first offering in a series of six semesters. Johnson will take the lead in 2013/14, Savelsberg in 2014/15. Students will read submitted papers that receive 'revise and resubmit' decisions and the reviewers' comments and discuss them with the editors. Different students may take the lead on specific papers in line with their substantive and methodological interests and expertise. Suggestions developed during these discussions will be incorporated into the R&R letters the editors will send out to authors. Students will thus get immersed in a range of cutting edge work done in the field. They will further gain crucial insights into the decision making processes associated with journal publishing. In this respect the course is intended to be a major professionalization tool that should be most helpful to graduate students who prepare to enter academic careers in which publishing papers in journals will be a crucial component. The process should make for an engaging collaborative, intellectual and professional, experience.

**Style:** 85% Discussion, 15% Student Presentation.

**Grading:** 20% in-class presentation, 80% class participation.

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**Soc 8090 Topics in Sociology: Sociology of Education: Journal Editing Seminar**

*1.5 credit(s), max credits 6, 4 completions allowed;*

**Instructor:** Warren, John R

**Description:** This course is centered around the journal Sociology of Education, which will be housed at the U of MN beginning July 1, 2013. Class sessions will focus on the operations of the journal, with an eye toward teaching students how research articles are evaluated; how the review process can shape and improve research; how the process of turning a first draft of a paper into a polished and published article unfolds; how to critique ongoing research in a professional way; and how to respond to such critiques about your own work. Along the way, involvement will provide an opportunity for students to gain theoretical, methodological, and substantive insight into a wide range of issues that touch on education in one way or another. Each week, students will (among other things) discuss articles that have been submitted; discuss external peer reviews of those articles; debate what decision should be made about submissions; think together about how to solicit more and better submissions; think together about reviewers and the review process; and think together about how to best use the journal's social media presence. Students who participate will be expected to do some work in preparation for each meeting. Project meetings will be lively and interactive, and will differ in focus and content from week to week.

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**Soc 8111 Criminology**

*3 credit(s);*

**Instructor:** Uggen, Christopher

**Description:** DESCRIPTION This seminar offers a graduate-level foundation of theory and new empirical research in
sociological criminology. Our focus is definitive statements from important theoretical traditions and critical empirical tests of these theories. In addition, we consider critiques of the theories or the research generated by them and attempts to translate theories into policy. You will read a host of challenging research articles throughout the semester, but I?ve tried to limit the number of required readings to about five per week. The recommended readings are all exemplar work on the topic that should be on your reading lists but won?t be discussed in our weekly meetings unless student interest is very high. I?ve put a lot of my own work on this syllabus ? not because it is exemplary (it is not) but so that I can share reviews and backstage details about the research and publication process that may be helpful to you. The required Kubrin volume offers an excellent introductory overview of this research literature, while also helping to fill gaps in coverage.

OBJECTIVES The course will help you develop a more nuanced understanding of the dominant theoretical traditions in criminology. This knowledge is absolutely fundamental to teaching criminology at the college level and to developing graduate reading lists and publishing research in the area. We will work through empirical pieces by many of the best sociological criminologists. As you develop your own research, it is useful to see how others have translated propositions into testable hypotheses, devised appropriate methodologies to test them, and presented the results to diverse audiences. The course will stimulate your thinking about questions at the intersection of science and public policy. These include how we produce our knowledge, its relevance to lives outside the academy (and penitentiary), and the utility of crime theories and criminologists. Such big-picture considerations may help you to choose the level of abstraction at which you work and the contributions you?d like to make as teachers and researchers. For example, I study crime, law, and deviance because I believe that good science can light the way to a more just and safer world. I?ll encourage you to developing your own goals, mission, and orientation to the field. Finally, a graduate seminar should encourage your professional development as you make the transition from student to independent social scientist. I will share anonymous reviews, letters from funding agencies and journal editors, and other materials that may show you another side of the research and publication process.

Style: 15% Lecture, 50% Discussion, 20% Student Presentation, 10% Guest Speakers, 5% Web Based.
Grading: 60% reports/papers, 20% in-class presentation, 20% class participation.

Soc 8190 Topics in Law, Crime, and Deviance: Juvenile Justice
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Feld,Barry C
Description: Legal, sociological, and philosophical bases of the principal agencies responsible for the control of youthful deviance. Emphasis on the juvenile courts' delinquency jurisdiction and the procedural and substantive limitations on the courts' authority to dispose of juvenile offenders.

Soc 8211 Race Relations Theory
3 credit(s);
Instructor: Hartmann PhD,Douglas
Description: This course is intended to provide graduate students with a broad overview of the major theoretical concepts, questions, paradigms and debates in the study of race, ethnicity, racism and race relations in sociology and other related fields. What? theories? here will be broadly construed to include everything from formal analytic modeling and testing to cultural critiques of taken-for-granted ontological presuppositions. We will begin with a brief introduction to basic definitional issues, traditional core theoretical frames and primary course concerns. The main body of the course will be devoted to in-depth reading and discussion of key books and articles on the major issues and themes in the field. These will include: explanations of racial/ethnic disparities; racial attitudes research; immigration; assimilation and neoadassimilation; critical race theory; race and popular culture; neoliberalism and race; intersectionality; whiteness theory; colorblindness; and multiculturalism. Throughout the twin goals of the course will be to grasp the complicated dynamic processes involved in the construction, reproduction, transformation and contestation of race and ethnicity as well as to stimulate thinking about the broader consequences of these processes and forces for social life taken as a whole.
Style: 25% Lecture, 50% Discussion, 25% Student Presentation.
Grading: 50% reports/papers, 25% reflection paper, 10% in-class presentation, 15% class participation.

Soc 8390 Topics in Political Sociology: Immigration, Citizenship & the Border
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Park,Lisa Sun-Hee
Description: This graduate seminar will focus on how the contemporary politics of immigration has transformed and complicated our understanding of citizenship and national boundaries in the United States. We will pay particular attention to the larger social significance of deportations and other modes of immigrant criminalization and removal. Within the current context of globalization, issues of migration, citizenship, and borders are dynamic, complex, and necessarily cross boundaries of discipline and nation. The goal of this course is to deepen our understanding of these issues and their interconnections in order to assess potential points of intervention. As such, the list of required texts will reflect an interdisciplinary approach to these challenging questions.

Soc 8701 Sociological Theory
A-F only, 4 credit(s);
Instructor: Gowan,Teresa
Description: Student may contact the instructor or department for information.
Soc 8890 Advanced Topics in Research Methods: Qualitative Data Analysis
3 credit(s), max credits 6;
Instructor: Baer,Alejandro
Description: The course will introduce several approaches to analysis of qualitative data (both textual or narrative and visual data), such as content analysis, discourse analysis and interpretative video-analysis. Seminar will involve: a) Reading and in-class discussion of exemplary works that comprise key theoretical and methodological considerations and b) conceptualize and undertake a hands-on analysis of qualitative data of their own. Students will be expected to have some data ready to work with and have some idea of how they want to situate their research questions in relation to relevant literature. Seminar sessions include lectures, discussions, and intensive group work.

Software Engineering  6-202 Kenneth H Keller Hall

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.

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.

SEng 5851 Software Project Management
A-F only, 3 credit(s);
Instructor: Kaman,John F
Description: Student may contact the instructor or department for information.

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.

SEng 8891 Independent Project
2-6 credit(s), max credits 12;
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.

SEng 8891 Independent Project
2-6 credit(s), max credits 12;
Instructor: Bitzenhofer, Neil A
Description: Student may contact the instructor or department for information.

SEng 8891 Independent Project
2-6 credit(s), max credits 12;
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: Pribyl, Douglas Wayne
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: Lamb, John A
This is the introductory course for Soil Science. The material covered includes information on physical, chemical, and biological soil properties. These properties are related to agricultural and environmental examples where knowledge of soils is important. This course has 2 lectures a week (Monday and Wednesday), a self-paced laboratory, and a recitation session on Thursday. The overall goal of this course is to provide a foundation of Soil Science principles that can be applied to future study and every day life.

Style: 40% Lecture, 20% Discussion, 40% Laboratory.
Grading: 29% mid exam, 20% final exam, 10% class participation, 19% laboratory evaluation, 22% problem solving.
Exam Format: Multiple choice and short answer.

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: Lamb, John A
Description: Student may contact the instructor or department for information.

Soil 3521 Soil Judging
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Bell, Jay
Description: Student may contact the instructor or department for information.

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 5125 Soil Science for Teachers
3 credit(s); Credit will not be granted if credit has been received for: SOIL 1125;
Instructor: Pribyl, Douglas Wayne
Description: Student may contact the instructor or department for information.

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 5611 Soil Biology and Fertility
3 credit(s);
Instructor: Allan, Deborah L
Description: Student may contact the instructor or department for information.
Soil 8510 Advanced Topics in Pedology: Peatlands
A-F only, 2 credit(s), max credits 12, 6 completions allowed;
Instructor: Nater, Ed
Description: Student may contact the instructor or department for information.

**Somali 808 Social Sciences Tower**

Somali 1221 Beginning Somali
A-F only, 5 credit(s);
Instructor: Ahmed, Said Salah
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 Salah
Description: Student may contact the instructor or department for information.

Somali 3227 Intermediate Somali I
A-F only, 5 credit(s);
Instructor: Ahmed, Said Salah
Description: Student may contact the instructor or department for information.

**Sonography University of Minnesota Rochester**

Sono 3011 Foundations of Sonography
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Youngs, Diane J
Description: Student may contact the instructor or department for information.

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 minimum of multiple choice & true-false items; encourage the use of natural language by using short answers and essays; Two oral interviews.

Span 1001 Beginning Spanish
5 credit(s);
Instructor: Santana, Vanessa 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. This five-credit course is designed for students who have less than two years of high school Spanish. It focuses on the development of communication skills in
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.

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. ***Sections [001 thru 016] normally meet in-person/on campus on Monday, Tuesday, Wednesday, and Thursday. In addition, there are a limited number of days (announced at the beginning of the semester) in which students are required to complete synchronous class work online during class time and/or attend class in person for exams and special assignments on Fridays. These sections include a significant amount of online work.***Sections [101-105] normally meet in-person/on campus on Monday, Wednesday, and Friday. In addition, there are a limited number of days (announced at the beginning of the semester) in which students are required to complete synchronous class work online during class time and/or attend class in person for exams and special assignments on Tuesdays and Thursdays. These sections include a significant amount of online work. ***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 NOTE: All sections include homework in an online workbook with specific due dates
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

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: 4% class participation. See attached syllabus
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.

Span 1003 Intermediate Spanish
5 credit(s);
Instructor: Wiesinger, Andrew David
Description: Student may contact the instructor or department for information.

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. **Sections [001 thru 015] normally meet in-person/on campus on Monday, Tuesday, Wednesday, and Thursday. In addition, there are a limited number of days (announced at the beginning of the semester) in which students are required to complete synchronous class work online during class time and/or attend class in person for exams and special assignments on Fridays. These sections include a significant amount of online work.*** Sections [101-105] normally meet in-person/on campus on Monday, Wednesday, and Friday. In addition, there are a limited number of days (announced at the beginning of the semester) in which students are required to complete synchronous class work online during class time and/or attend class in person for exams and special assignments on Tuesdays and Thursdays. These sections include a significant amount of online work.*** 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.
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: Castro, Cristina Isabel
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
Grading: See attached syllabus

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

**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.

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**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.

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**Span 1520 Review of Foundations in Spanish**

- **A-F only, 1 credit(s);**
- **Instructor:** Punti, Gemma
- **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 1522 Spanish II**

- **A-F only, 3 credit(s);**
- **Instructor:** Punti, Gemma
- **Description:** Student may contact the instructor or department for information.

**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 2521 Spanish III**

- **A-F only, 3 credit(s);**
- **Instructor:** Henderson Vazquez, Teresa A
- **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.
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);1004 or 1014 or 1044, LPE pass
Credit will not be granted if credit has been received for: SPAN 3015H;
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 3015H Spanish Composition and Communication
A-F only, 4 credit(s);[1004 or 1014 or 1044], LPE pass, Honors student
Credit will not be granted if credit has been received for: SPAN 3015;
Instructor: Orive-Abad MA,Begona
Description: Student may contact the instructor or department for information.

Span 3104W Introduction to the Study of Hispanic Literatures
A-F only, 3 credit(s);3015, Spanish [major or minor]or Span-Port major
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] or Span-Port major
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
Span 3401 Latino Immigration and Community Service
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: STAFF
Description: Span 3401 meets the CLE requirements for Citizenship and Public Ethics and that for Diversity. This is a service-learning course in which students work directly with Latino immigrants. In class, the student will analyze U.S. power structures around Latino emigration and issues confronting societies with a rapid demographic change such as has been the case with Latino immigration. Topics covered include: the relationship between the global economic system and emigration from Latin America, human rights issues along the U.S./Mexican border, federal immigration reform, language issues, and Latino contributions to U.S. culture and economy. Students reflect on the societal and individual responsibility to create more inclusive and just political, economic, and educational systems within this country. Students will be challenged to analyze systems of social power and privilege in each of these topics by studying multiple perspectives, reflecting on their personal roles and, most importantly, by hearing the voices of Latino immigrants. Students will be expected to be active participants in dialogues with classmates and community members and have multiple opportunities to develop and express their opinions in a challenging and respectful environment. Students will be expected to connect what they are learning to their own lives and to the world around them. Students will become actively engaged in analyzing Citizenship, Public Ethics and Diversity issues through: * 1 class per week (2.5 hrs) * 33 hours of community service working with Latino immigrants, speaking mostly Spanish * Community visits with Latino leaders in education, advocacy work, and politics Objectives of this class are to create cross-cultural relationships, practice Spanish language skills, develop the ability to analyze social justice issues, and give students the tools to actively engage in participatory democracy throughout their lives.

Span 3404 Medical Spanish and Community Health Service
3 credit(s);
Instructor: STAFF
Description: 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: 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 criollo posturing of the savant Carlos de Siguencia 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 3510 Issues in Hispanic Cultures: Art and Politics of Twentieth Century Spain
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Calvo, Maria Antonia
Description: For FALL 2013: TOPIC: Art and Politics of Twentieth Century Spain. DESCRIPTION: This course addresses the interconnection between politics and cultural life. Focusing on the changes in the visual arts that occurred in Twentieth Century Spain, we will analyze the impact that the political environment has on creative work and the impact that creative work has on social values and politics. To explore different ways that art and politics intersect, the course will be divided into four historical periods that occurred in Spain over the past century: the instability that governed the first third of the century; the unexpected Second Republic that dissolved into civil war; Franco’s forty-year dictatorship; and the establishment of a democracy. Key cultural manifestations within each period will be identified. Emphasis is on painting and sculpture including the works of Nonell, Picasso, Julio Gonzalez, Miro, Alberto, Saura, Equipo Cronica, Chillida, Gordillo, Miquel Navarro and Barcelo. Lectures, reading, written assignments, students’ presentation and other work in the course are all in Spanish.

Style: 50% Lecture. Other 50% is discussion and multi-media presentations.
Grading: 30% final exam, 45% reports/papers, 25% in-class presentation.
Exam Format: Essay and short answers.

Span 3510 Issues in Hispanic Cultures: Race in Latin America
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Hanneken, Jaime Elizabeth
Description: Fall 2013 with Professor Jaime Hanneken, Topic Title: Race in Latin America

Span 3510 Issues in Hispanic Cultures
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Yaffe Esposito, Jaime Gabriel
Description: Student may contact the instructor or department for information.

Span 3512 Modern Latin America
A-F only, 3 credit(s);
Instructor: Forcinito, Ana
Description: Student may contact the instructor or department for information.

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. group activities
Exam Format: mixed format

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 espa?ola. 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

Span 3800 Film Studies in Spanish: Women and Film in Latin America
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Forcinito, Ana
**Description:** For Fall 2013: TOPIC TITLE: Women and Film in Latin America. DESCRIPTION: La reciente explosión de cine de mujeres en América Latina durante las últimas décadas invita a reflexionar acerca de la relación entre las mujeres y el cine en los países latinoamericanos. Esta participación dentro de un medio considerado por décadas como un dominio exclusivamente masculino comienza durante los ochenta con la segunda ola del nuevo cine latinoamericano, momento en el cual comienza redifinar el cine a partir del enfasis en la diferencia. Las mujeres directoras empiezan a aportar nuevas visiones no solo respecto de las imágenes narrativas sino además respecto de las alegorías nacionales y las narrativas patriarcales que acompañaron los modos de narrar las naciones y que caracterizaron la primera ola del nuevo cine latinoamericano. En este curso, analizaremos como y en qué diversas formas el cine de mujeres subvierte no solo la representación del género sexual, sino también de las formas de acercarse a la estética, a los medios, a la política, a la memoria, a la historia y a la ciudadanía. Consideraremos a las mujeres como sujetos historicos y políticos pero también pondremos atención en las diferencias y los conflictos entre las mujeres mismas y sus posiciones feministas.

**Span 3910 Topics in Spanish Peninsular Literature: The Ethics of Bullfighting**  
A-F only, 3 credit(s), max credits 9, 3 completions allowed;  
**Instructor:** Viestenz, William R  
**Description:** The Ancient Roman geographer Strabo once compared the shape of Iberia to a stretched out bull's hide. From this point on, the image of the bull and the practice of bullfighting have played a prominent role in Spanish culture and national identity. This course analyzes the cultural legacy of bullfighting, its relation to the public spectacle of violence, and the uneasy distinction between the human and the animal. We will explore, through literature, cinema, and visual art, the contradiction between bullfighting as both a cultural patrimony and an unethical treatment of animals.  
**Style:** 15% Lecture, 65% Discussion, 20% Small Group Activities.  
**Grading:** 15% mid exam, 45% reports/papers, 20% attendance, 10% in-class presentation, 10% class participation.

**Span 3920 Topics in Spanish-American Literature: Human Rights and Latin American Theater**  
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:** Ramos-Garcia, Luis A  
**Description:** Fall 2013: TOPIC: HUMAN RIGHTS AND LATIN AMERICAN THEATER DESCRIPTION: This course will offer an introduction to contemporary academic discourses in Latin America, focusing specifically on Human Rights and drama. Students will examine the evolution of a theater discourse that explores national identity, civil rights, gender issues, human rights discourses and the recovery of historical and mythical memories. The readings will be studied and discussed in Spanish and in their literary, cultural and political contexts. Supplementary readings (all in Spanish) will be suggested or provided when appropriate.

**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 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 5106 Medieval Iberian Literatures and Cultures**
3 credit(s);
Instructor: Hamilton, Michelle Marie
**Description:** En este curso exploraremos la literatura y cultura medieval de la península ibérica y como las teorías modernas (como las del "orientalismo," el "otro," el "monstruo," y el "humanismo universal") pueden aplicarse a ellas. A través de lecturas de la poesía andalusi, el drama, los cuentos en marco, y las narraciones históricas revelan aspectos de varios corrientes (lingüísticos, religiosos, étnicos) de la realidad de la Península durante la Edad Media.
**Grading:** 40% reports/papers, 10% written homework, 20% in-class presentation, 30% class participation.

**Span 5526 Colonial Discourse in Spanish American Writing**
3 credit(s);
Instructor: Marrero-Fente, Raul A
**Description:** Student may contact the instructor or department for information.

**Span 5711 The Structure of Modern Spanish: Phonology**
3 credit(s);
Instructor: Face, Timothy L
**Description:** This course provides an investigation of the Spanish sound system and considers some of the major topics in Spanish phonology from theoretical and experimental perspectives. We will review the traditional articulatory descriptions of Spanish sounds, learn the basics of the acoustic nature of these sounds, and see how these form the basis for the building blocks of modern phonological theory.
**Style:** 50% Lecture, 50% Discussion.
**Exam Format:** Essay, problem solving

**Span 5716 Structure of Modern Spanish: Pragmatics**
3 credit(s);
Instructor: Ocampo, Francisco Antonio
**Description:** This course constitutes an introduction to the field of pragmatics. The main topics of the discipline are discussed: deixis, conversational implicature, presupposition, speech acts and conversational analysis. The target audience is graduate students.
**Style:** 60% Lecture, 40% Discussion.
**Grading:** 30% mid exam, 30% final exam, 40% problem solving.
**Exam Format:** Essay

**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: Face, Timothy L
**Description:** Student may contact the instructor or department for information.

**Span 8900 Spanish Seminar: Spanish and Spanish-American Baroque/ Neobaroque**
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Spadaccini, Nicholas
**Description:** For Fall 2013: TOPIC TITLE: Spanish and Spanish-American Baroque/ Neobaroque (Major and Minor Strategies) DESCRIPTION:

**Spanish and Portuguese 214 Folwell Hall**

**SpPt 3600 Topics in Spanish and Portuguese Studies (Taught in English)**
3 credit(s);
Instructor: Afanador-Pujol, Angelica J
**Description:** This course is cross-listed with ARTH 3205: Introduction to Aztec, Maya, and Inka Art, from Ancient Times to the Colonial Period ***** This course introduces students to the art history of indigenous peoples from Mexico, Central America, and South America before the arrival of Europeans. We will study their prolific artistic production starting with their earthworks in the deserts of Peru and ending with their stone pyramids and painted codices of Guatemala and Mexico. We will critically analyze how these cultures produced, shaped, and used art to shape the world around them. This class will equip you with the tools to investigate Pre-Columbian art at more advanced levels.
**Grading:** 20% mid exam, 25% final exam, 30% reports/papers, 15% special projects, 10% class participation.
**Exam Format:** in-class essays

**SpPt 5930 Selected Topics in Hispanic and Lusophone Cultural Discourse**
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Villar, Susan McMillen
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 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

**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.

**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.

**SLHS 1402 The Talking Brain**
3 credit(s); Meets CLE req of Social Sciences
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.
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: 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 3555H Honors Thesis
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Stronach, Sheri Tracy
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
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: 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 3994 Directed Research
1-12 credit(s), max credits 24;
Instructor: Stronach, Sheri Tracy
Description: Student may contact the instructor or department for information.
SLHS 4301 Introduction to the Neuroscience of Human Communication
3 credit(s);
Instructor: Zhang,Yang
Description: Student may contact the instructor or department for information.

SLHS 4402 Assessment and Treatment in Speech-Language Pathology
A-F only, 3 credit(s);
Instructor: Stronach,Sheri Tracy
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.
Grading: 40% reports/papers, 40% quizzes, 20% problem solving.
Exam Format: Multiple choice/short essay

SLHS 5503 Fluency and Motor Speech Disorders
3 credit(s);
Instructor: Sasisekaran,Jayanthi
Description: Student may contact the instructor or department for information.

SLHS 5504 Dysphagia
2 credit(s);
Instructor: Poluha,Patricia Catherine
Description: Student may contact the instructor or department for information.

SLHS 5602 Phonological Disorders
3 credit(s);
Instructor: Munson,Benjamin
Description: Student may contact the instructor or department for information.

SLHS 5603 Language and Cognitive Disorders in Children
3 credit(s);
Instructor: Stronach,Sheri Tracy
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. Audioligic 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 audioligic 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 5808 Hearing Disorders
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: Deruiter, Mark
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 8720 Clinical Education in Speech-Language Pathology
S-N only, 1-8 credit(s), max credits 24, 24 completions allowed;
Instructor: Deruiter, Mark
SLHS 8805 Hearing Science Foundations of 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: 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.

SLHS 8994 Directed Research  
1-12 credit(s), max credits 18, 18 completions allowed;  
Instructor: Stronach, Sheri Tracy  
Description: Student may contact the instructor or department for information.

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Sport Management  
220 Cooke Hall

SMgt 1701 Introduction to Sport Management  
A-F only, 2 credit(s);  
Instructor: Richardson PhD, 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: Maturi, Joel  
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: Lisec, 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: Allison JD, Rayla
Description: U.S. legal system, its structure/terminology. Sport legal aspects of contract law, statutory law, constitutional law, intellectual property, negligence, risk management. Managerial analysis, decision making.

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: Buysse PhD, Jo Ann
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

SMgt 3993 Directed Study in Sport Management
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Maturi, Joel
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

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

**SMgt 3993 Directed Study in Sport Management**  
A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;  
Instructor: Richardson PhD, Tiffany  
Description: Student may contact the instructor or department for information.

**SMgt 3996 Practicum: The Sport Experience**  
S-N only, 2-8 credit(s), max credits 8, 4 completions allowed;  
Instructor: Buysses PhD, Jo Ann  
Description: Student may contact the instructor or department for information.

### Statistics 313 Ford Hall

**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
Credit will not be granted if credit has been received for: STAT 5101;
Instructor: Doss, Charles R
Description: Student may contact the instructor or department for information.

Stat 4893W Senior Project
A-F only, 3 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
Credit will not be granted if credit has been received for: STAT 3011;
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 5031 Statistical Methods for Quality Improvement
4 credit(s);
Instructor: Hawkins, Douglas M
Description: Student may contact the instructor or department for information.

Stat 5031 Statistical Methods for Quality Improvement
4 credit(s);
Instructor: Majumdar, Subho
Description: Student may contact the instructor or department for information.

Stat 5101 Theory of Statistics I
4 credit(s); MATH 2263 or MATH 2374
Credit will not be granted if credit has been received for: STAT 4101;
Instructor: Jiang, Tiefeng
Description: Student may contact the instructor or department for information.

Stat 5101 Theory of Statistics I
4 credit(s); MATH 2263 or MATH 2374
Credit will not be granted if credit has been received for: STAT 4101;
Instructor: Wang, Lan
Description: No credit if credit was received for STAT 4101 or MATH 5651. Same as MATH 5651. Logical development of probability and some basic issues in Statistics. Probability spaces, random variables and their distributions and expected values, law of large numbers and central limit theorem, generating functions, sampling, sufficiency, and estimation.

Stat 5302 Applied Regression Analysis
4 credit(s);
Instructor: Xu, Gongjun
Description: Student may contact the instructor or department for information.

Stat 5303 Designing Experiments
4 credit(s);
Instructor: Oehlert, Gary W
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

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**Stat 5421 Analysis of Categorical Data**

- 3 credit(s);
- **Instructor:** Rothman, Adam Joseph
- **Description:** Student may contact the instructor or department for information.

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**Stat 5601 Nonparametric Methods**

- 3 credit(s);
- **Instructor:** Geyer, Charles J
- **Description:** This course covers 3 different subjects (all part of nonparametric statistics): classical rank-based tests and related confidence intervals and point estimators, bootstrap and subsampling bootstrap, and smoothing. All of the material is presented at an applied level; the prerequisites are respected; no theoretical knowledge is assumed (other than what hypothesis tests and confidence intervals are, basic intro stats). The R computer language will be used extensively; all tests will be take-home so the computer can be used (all problems use the computer). No knowledge of R is assumed, but students will find the course easier if they have at least seen it. The course has two required textbooks, Hollander and Wolfe, Nonparametric Statistical Methods, 2nd Edition, Wiley, 1999, and Efron and Tibshirani, An Introduction to the Bootstrap, Chapman & Hall / CRC Press, 1994. Some reading in these books is required, and some homework problems will be taken from these books. They will be on reserve in the math library so those who do not wish to purchase them can make do.
- **Style:** 100% Lecture.
- **Grading:** 50% mid exam, 25% final exam, 25% written homework.
- **Exam Format:** take-home use computers

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**Stat 5993 Tutorial**

- 1-6 credit(s), max credits 12, 12 completions allowed;
- **Instructor:** STAFF
- **Description:** Students may contact the department for information.

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**Stat 8051 Applied Statistical Methods 1: Computing and Generalized Linear Models**

- A-F only, 4 credit(s);
- **Instructor:** Yang, Yuhong
- **Description:** This is the first part of a two-year sequence on applied statistical methods for first-year graduate students in statistics. Others may enroll only with the permission of the instructor. This course focuses on applied regression, with an emphasis on computing with R. It will cover linear regression with one and many predictors; graphics; model building and assessment; diagnostics; generalized linear models, including logistic and Poisson regressions; two way and higher dimensional contingency tables. TEXTS: S. Weisberg (2005), Applied Linear Regression (3rd Ed), Wiley. J. Faraway (2006) Extending the Linear Model with R, Chapman & Hall/CRC Press, 1994. Some reading in these books is required, and some homework problems will be taken from these books. They will be on reserve in the math library so those who do not wish to purchase them can make do.
- **Grading:** Two midterm exams: 45%; Homework: 15%; Final Exam: 40%
- **HOMEWORK:** Homework will be assigned on a weekly basis. **COMPUTING:** We will be using software R for this course. The main web site for R is www.r-project.org, where one can find basics of R, including program download sites. A proper introduction to R will be given in the beginning of the course.

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**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.

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**Stat 8101 Theory of Statistics 1**

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

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**Stat 8111 Mathematical Statistics I**

- 3 credit(s);
- **Instructor:** Jones, Galin
- **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: Wang, Lan  
- Description: Student may contact the instructor or department for information.

Stat 8931 Advanced Topics in Statistics: Aster Models  
- 3 credit(s), max credits 12, 4 completions allowed;  
- Instructor: Geyer, Charles J  
- Description: Student may contact the instructor or department for information.

Stat 8932 Advanced Topics in Statistics: Dimension Reduction: Envelope Models and Methods  
- 3 credit(s), max credits 12, 4 completions allowed;  
- Instructor: Cook, R. Dennis  
- Description: Student may contact the instructor or department for information.

Stem Cell Biology  
- Stem Cell Institute

Stem Cell 5051 Stem Cell Biology Practical Training Module  
- A-F only, 1 credit(s);  
- Instructor: Keirstead, Susan Alice  
- Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

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: Keirstead, Susan Alice  
- Description: Student may contact the instructor or department for information.

Studies in Cinema and Media Culture  
- 235 Nicholson Hall

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: Johnson, Kjel Wayne  
- Description: SCMC 3001W examines the evolution of "media culture" and its artifacts by way of the histories and and theories of images, visual technologies, and what vision itself "means" and "does" in different historical and cultural contexts. Together, these frame our "window on the world," informing our (post?)modern understanding of aesthetics, politics, experience, perception, and identity -- in short, the ways we "make meaning" of our culture and our place (indeed, placement) within it. Rather than attempting to frame the development of this amorphous force called "media culture" in a purely linear way, from "beginning to now" (or, worse, to proceed with the idea that such a history is something comprehensible in the limited time we will share in this course), we will instead begin at "the end", with the purported "death of the cinema." From this situation, we will step back, in both scope and time, to explore key concepts and questions regarding the power of the visual as it has taken new forms and functions in Western culture from "the modern" to "the postmodern," the ways in which technological, social, and industrial developments in the media have given rise to new
theoretical and philosophical perspectives in the academy, and the power, limits, and possibilities of systems of representation as they impact daily life ... all considered in terms of "how we got here," (a complicated path!) and if "here" is really all we think, see, and know it to be. Our journey will be a selective travelogue, composed in snapshots torn from the fabric of a larger whole, giving an incomplete but hopefully meaningful image of the complex intersections between media, culture, experience, and scholarship over time.

**Style:** 50% Lecture, 40% Film/Video, 10% Discussion.

**SCMC 3201 Fundamentals of Digital Filmmaking**

- **A-F only, 4 credit(s);**
- **Instructor:** Bizri, Hisham M.
- **Description:** This course is an introduction to the practice of digital cinema production techniques. The main focus of the course will be practical, affording students ample time to direct, shoot, and edit (including post-production) original works of cinema. In doing so, students will begin to master the use of both optical and digital tools such as the camera, optics, lights, color, and the computer, and to explore how they might draw on other media (music, painting, theater, photography, and sculpture) in their productions. We will inform this practical focus by attending, as well, to how films are made is terms of space, light, action, dramatic structures, montage, and the overall visual vision of master filmmakers.

**Style:** 100% Studio.

**Grading:** 50% special projects, 50% attendance.

**SCMC 5001 Critical Debates in the Study of Cinema and Media Culture**

- **4 credit(s);**
- **Instructor:** Johnson, Kjel Wayne
- **Description:** SCMC 5001 offers an overview of the critical debates that historically have shaped and continue to inform the study of film and media culture. We will consider a series of key theoretical and material contestations within academic discourse and daily life, with discrete units focusing on (among other things) the image and representation; the hegemony of ocularcentrism; political economy; spectatorship/reception; globalization/cultural imperialism; and the oft-abused watchword that organizes it all today, ?postmodernity.? We will pay particular attention throughout to ways the emergence of ?new media? and the expansion of global capital continue to force critical rethinking of classical (and predominantly cinematic) theoretical models of media production, representation, and reception. Students are expected to have some prior acquaintance with the basic concepts, vocabularies, and trends in cinema and media studies.

**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
SCO 3045 Sourcing and Supply Management  
A-F only, 2 credit(s);  
Instructor: Buchner, Thomas Wayne  
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
SC0 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 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.

SC0 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.

SC0 6059 Quality Management and Lean Six Sigma
A-F only, 4 credit(s);
Instructor: Martens, Scott L
Description: Student may contact the instructor or department for information.

SC0 6850 Topics in Operations and Management Science: Operational Excellence via Lean Thinking
A-F only, 2 credit(s), max credits 12, 4 completions allowed;
Instructor: Shah, Rachna
Description: Student may contact the instructor or department for information.

SC0 8755 Behavioral Operations
A-F only, 3 credit(s);
Instructor: Donohue, Karen Lisa
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: Arnold, Todd W.
Description: Sustainability recognizes that economic growth, social equity, and environmental integrity are all worthy goals, but that these goals compete so that it is impossible to maximize all three of them concurrently. Some objectives of sustainability are therefore realized at the cost of other equally valid objectives. Sustainable People, Sustainable Planet provides an historical, ethical and technical overview of various models for understanding sustainability. It also demonstrates, by utilizing a variety of real-world case studies, the conflicts and trade-offs that occur from trying to put sustainability into practice. The course is intended for sophomores and above who are interested in completing the Sustainability Studies Minor, and for all students who are interested in the subject and wish to satisfy the University's liberal education theme for the Environment. The course should be considered "reading intensive" but it has no prerequisites.
Style: 70% Lecture, 30% Discussion.
Grading: 67% reports/papers, 23% special projects, 10% class participation.

Sust 4004 Sustainable Communities
**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 4096 Sustainability Internship**  
*A-F only, 1-4 credit(s), max credits 8;*  
**Instructor:** Wanberg, David  
**Description:** Student may contact the instructor or department for information.

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**Sustainable Agricultural Systems 411 Borlaug Hall**

**SAgr 8010 Colloquium in Sustainable Agriculture**  
*A-F only, 2 credit(s);*  
**Instructor:** Sheaffer, Craig Charles  
**Description:** Student may contact the instructor or department for information.

**SAgr 8020 Field Experience in Sustainable Agriculture**  
*S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;*  
**Instructor:** Jordan, Nicholas Royal  
**Description:** Student may contact the instructor or department for information.

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**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.

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**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
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: See attached syllabus

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: See attached syllabus

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

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 studentCredit 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: Student may contact the instructor or department for information.

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. Mostly, 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. Mostly, 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:** 30% reports/papers, 30% 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 phrases; 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, 25% other evaluation. Attendance & Participation; 25% Attitude & Growth.

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**Th 1322 Creating the Performance**

**3 credit(s);**

**Instructor:** Seifert, Luverne G

**Description:** TH 1322 is designed to give theatre students an introduction to various techniques of creating performance. Students will learn about fundamentals of interpretation, blocking, movement, composition, communication, stage picture and rhythm as well as terminology related to directing and theatre in general. The course is a practical examination of contemporary performance modes and theatre practices. This is not a survey of genres but an exploration of specific tools of creating performance. Designed to stimulate individual expression and creativity through the exploration of theatrical genres and techniques while at the same time encouraging originality and individual creativity. The goal of this course is to offer students a variety of methods and approaches of creativity and to encourage curiosity and exploration. This course will provide a foundation or beginning point for further exploration recognizing that each student will make personal choices later on. Evaluations and Criteria: 25% Attendance and participation, 40% creation projects, 20% Written assignments, 15% process of evaluation.

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**Th 1322 Creating the Performance**

**3 credit(s);**

**Instructor:** Taylor, Dominic A

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

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**Th 1362 Dance for Musical Theatre**

A-F only, 2 credit(s); Credit will not be granted if credit has been received for: DNCE 1362;

**Instructor:** Lee, Linda Talcott

**Description:** This class will introduce a variety of dance styles found in Musical Theatre currently and in the past. The works of prominent choreographers in this field, such as Jerome Robbins, Bob Fosse, Michael Bennett and Michael Kidd will be discussed and learned through movement across the floor, center exercises and center combinations. A technical jazz warm up will be given at the start of each class to prepare the body for energetic movement as well as giving the student an understanding of body placement, dance vocabulary, and style. Emphasis will be placed on stretching emotional boundaries through movement, creating the ability to develop a character, a talent needed in musical theatre dancing. Prior dance training is recommended, but not necessary as long as the student enters with an open mind. This class will have live accompaniment.

**Style:** Studio
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: Maxwell, Katherine Nicole
Description: Student may contact the instructor or department for information.

Th 1905 Freshman Seminar: The Great Actresses and Divas
A-F only, 3 credit(s), max credits 6;
Instructor: Nash PhD, Elizabeth Hamilton
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 and the twenty-first. The activities of their male contemporaries are well documented, but the female performers have been sadly neglected. The names of the actress Sarah Bernhardt, the opera diva Maria Callas, the film star Meryl Streep and the musicals diva Julie Andrews are generally recognized, but what about Isabella Andreini, Adrienne Lecouvreur, Sarah Siddons, Camilla Williams, Lillian Gish, 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, DVDs, CDs and student oral reports on individually selected stage, film or singing actresses.

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: Intro to playwriting will introduce students to the rudiments of dramatic construction while it implores the student to mine the storehouse of inspiration all around us. The course will consist of writing assignments, readings of plays and other writings, class discussions and will culminate with the completion of a short one-act play.

Th 3171 History of the Theatre: Ancient Greece Through Neo-Classicism
3 credit(s);
Instructor: Kobialka, Michal A
Description: The course focuses on a critical examination of representational practices in the period from Ancient Greece to the French Revolution. While reviewing these representational practices, which materialize as play-texts, performances, theatre architecture, theatre rebellions and regulations, theoretical writings, etc., the students will discuss how they were produced, given intelligibility, and disseminated. What are the consequences of using or promoting these and not other representational practices? In order to answer this question, the students will explore the following questions/issues: the Western origins of theatre and drama, Aristotle’s Poetics, the practices of controlling and censoring creative activities in Rome and in Renaissance Italy and England, the emergence of medieval liturgical drama as well as medieval modes of representation, a shift from resemblance oriented visual systems to the neoclassical ideal of the French Academy, the female actors and playwright in Restoration, the drama and theatre of the long eighteenth century and how they participated in the process of fashioning a new personality/economic type. This course investigates how performance events are brought to our attention, how they are made worthy of notice, and how they are rationalized as significant for theatre history.
Style: 60% Lecture, 40% Discussion.
Grading: 20% class participation, 80% other evaluation. three written essay exams
Exam Format: essay--the student is asked to answer four Questions during the exam.

Th 3314 Text and the Actor
A-F only, 3 credit(s);
Instructor: Nash PhD, Elizabeth Hamilton
Description: This course focuses on the art of dynamic interpretation in the theatre. Our goal is to explore a wide range of dramatic and lyrical forms and styles accompanied by lectures to set them in historical perspective. Along with the performance of dramatic monologues or musical theatre spoken dialogue and lyrics, there will be in-class viewings of Zoe Caldwell’s Medea, Ian McKellan’s Acting Shakespeare, Mike Leigh’s Topsy-Turvy, Barbra Streisand’s The Making of the Broadway Album and Kristin Chenoweth’s American Songbook 2013. Periods to be addressed will be classical Greek, Shakespeare, high comedy, modern stylized drama and musical theatre from the eighteenth century Beggar’s Opera to present day musical theatre. Due to the ensemble and performing emphasis of this course, attendance is required and will figure in grading. By the end of the course, you will have the knowledge and ability to interpret with confidence challenging texts of heightened language covering a period of 2,500 years or musical theatre spoken dialogue and lyrics from 1728 to today.

Th 3321 Stanislavski and 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 psycho-physical methodologies of Jacques Lecoq with emphasis on neutral mask, acrobatics, commedia, clowning and buffooning. The Lecoq Method is a psychophysical approach to creating theater that emphasizes the use of the entire body to communicate emotion. The course will investigate poetic, tragic and playful performance through the analysis of movement and gesture. Students will create solo and collaborative performances. The actor’s body knowledge, strength and stamina will also be addressed in every class. Physical concepts will be connected to breath and vocal expression. Students will be asked to practice and examine performance every class in order to build a common vocabulary for analyzing and critiquing their own work and the work of others. Grading: 30% active participation, attendance and class assignments, 40% Performance, 20% written,
10% growth.

**Th 3521 Introduction to Scenic Design for Theater and Performance**
3 credit(s);
Instructor: Ramey, Nayna Lee
Description: Student may contact the instructor or department for information.

**Th 3571 Introduction to Stage Technology**
A-F only, 3 credit(s);
Instructor: Healey, Bill
Description: Student may contact the instructor or department for information.

**Th 3711 Beginning Directing**
3 credit(s);
Instructor: STAFF
Description: An introduction to and application of the techniques and theories of stage direction. Script analysis, composition, blocking, rehearsal methods, improvisation, actor coaching and scene production are introduced.

**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: Senior class**
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: BA Mentoring: Junior Class**
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: BA Mentoring: Sophomore Class**
1 credit(s), max credits 8, 8 completions allowed;
Instructor: Seifert, Luverne G
Description: Student may contact the instructor or department for information.

**Th 4177W Survey of Dramatic Literature I: Strategic Interpretation**
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Adams Jr, Charles Nathan
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: Student may contact the instructor or department for information.

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: Price, Joe  
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: This makeup course is structured with an hour long demonstration by the instructor followed by a very practical, hands on application of the make up techniques by the student on their own faces. Topics covered are highlights and shadows, beauty, correction, skinny and stout, gender reversal, beards and facial hair, period hair styles, trauma, old age, fantasy, animals, character from a play, historical character, bald caps, and white face (clowns). There is a written final and a final make up design and application by the student. One short paper is required analyzing the make up and hair design in a play of the student's choice.

Th 4550 Video Technology  
3 credit(s);  
Instructor: Gwinup, Martin Bruce  
Description: By the end of this course students should understand and be comfortable with common approaches to lighting, camera operation, audio and production practices for video production. This course is based both in studio as well as in the field. Specifics of video protocols and formats will be discussed. The creative discussions in the class will include aesthetics, continuity and composition. Students understanding of the topics and techniques discussed in this course will culminate in their final project. This course is open to any student on campus who has an interest in video or film production.

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 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: Werry, Margaret L  
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);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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 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: Allyn-Schwerin, Jason Daniel
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: Powers, Angelique Renee
Description: Student may contact the instructor or department for information.

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: Gramann II, Dwane J
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 5993 Directed Study
1-5 credit(s), max credits 20, 20 completions allowed;
Instructor: STAFF
Description: Guided individual reading or study.

Th 8114 Theatre: Performance and Political Modernity
3 credit(s);
Instructor: Werry, Margaret L
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: Johnson, Montana J
Description: Student may contact the instructor or department for information.

Th 8950 Topics in Theatre
2 credit(s), max credits 8;
Instructor: Werry, Margaret L
Description: Student may contact the instructor or department for information.

Th 8950 Topics in Theatre
2 credit(s), max credits 8;
Instructor: Dilliard, Marcus F
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)**

**TRad 8204 Tumor Clinic Conference**
- **0 credit(s);**
- **Instructor:** Dusenbery MD, Kathryn E
- **Description:** Student may contact the instructor or department for information.

**TRad 8240 Radiation Therapy Conference**
- **0 credit(s);**
- **Instructor:** Lee, Chung Kyu
- **Description:** Student may contact the instructor or department for information.

**TRad 8310 Fundamentals of Radiation Therapy**
- **1 credit(s);**
- **Instructor:** Lee, Chung Kyu
- **Description:** Student may contact the instructor or department for information.

**TRad 8320 Radiation Therapy Treatment Planning Problems**
- **1 credit(s);**
- **Instructor:** Orner MD, James B
- **Description:** Student may contact the instructor or department for information.

**TRad 8325 Radiation Therapy Pediatrics Oncology**
- **1 credit(s);**
- **Instructor:** Dusenbery MD, Kathryn E
- **Description:** Student may contact the instructor or department for information.

**TRad 8350 Research: Radiation Therapy**
- **1-15 credit(s), max credits 15, 1 completion allowed;**
- **Instructor:** Dusenbery MD, Kathryn E
- **Description:** Student may contact the instructor or department for information.

**TRad 8450 Research: Radiation Biology**
- **1-15 credit(s), max credits 15, 1 completion allowed;**
- **Instructor:** Ritenour, Russell
- **Description:** Student may contact the instructor or department for information.

**TRad 8550 Research: Radiological Physics**
- **1-15 credit(s), max credits 15, 1 completion allowed;**
- **Instructor:** Gerbi PhD, Bruce J
- **Description:** Student may contact the instructor or department for information.

**Toxicology  244 Veterinary Diagnostic Lab**

**Txcl 5195 Veterinary Toxicology**
- **A-F only, 3 credit(s); Grad student or instr consent**
  Credit will not be granted if credit has been received for: CVM 6195;
- **Instructor:** Murphy, Michael J
- **Description:** Student may contact the instructor or department for information.

**Txcl 8013 Advanced Toxicology II**
- **A-F only, 3 credit(s);**
- **Instructor:** Murphy, Michael J
- **Description:** Student may contact the instructor or department for information.
**Txcl 8100 Investigative Toxicology**  
A-F only, 1 credit(s), max credits 2;  
**Instructor:** Wallace, Kendall B.  
**Description:** Student may contact the instructor or department for information.

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**Translation and Interpreting 160 McNamara Center**

**TrIn 900 Special Education for Interpreters**  
S-N only, 0 credit(s);  
**Instructor:** Tapias-Heinrich, Betty Ann  
**Description:** Student may contact the instructor or department for information.

**TrIn 1201 Health Care Terms and Concepts for Interpreters**  
A-F only, 3 credit(s);  
**Instructor:** Meininger, Eric Thomas  
**Description:** This course is an introduction to the special varieties of English used by health care providers when they talk with patients and family members in clinical settings. Students study specialized vocabulary including the complex terminology of anatomy and physiology, as well as names of diseases, common medications, treatments, medical equipment and procedures. Students also learn how health care provider/patient interviews are organized, how technical medical terms are used in professional communications with patients, and how understandings are negotiated between providers and patients. Terminology will be studied using programmed self-instruction. Guest Speakers (e.g., a pediatrician, an oncologist, a dentist, a pharmacist, or a midwife) will be invited in to discuss their own patterns of professional communication and the special issues they encounter in communicating with patients from other cultures. This is a three-credit course, open to all interested students. There are no prerequisites to this course, however, students are strongly urged to complete TrIn 3101 Introduction to Interpreting before taking this course, or to take it concurrently, in order to be prepared to enter TrIn 3102 in January. Previous exposure to interpreting/translation work is recommended, but not required. This course is a prerequisite to TrIn 4201, Interpreting in Health Care Settings. TrIn 4201 is open only to students who have completed TrIn 1201 and TrIn 3102.  
**Style:** 20% Lecture, 10% Discussion, 10% Small Group Activities, 40% Guest Speakers, 20% Web Based. This is an evening class. Participants are expected to be in class by the 6:10pm starting time.  
**Grading:** 45% mid exam, 30% final exam, 15% written homework, 10% class participation. The class participation percentage also reflects attendance.  
**Exam Format:** Students must pass two in-class tests on technical terms and concepts (fill in the blank, true/false, multiple choice). The final, cumulative exam will also include an essay.

**TrIn 1301 Legal Terms and Concepts for Interpreters**  
3 credit(s);  
**Instructor:** Cazales, Cesar Alexander  
**Description:** Student may contact the instructor or department for information.

**TrIn 3001 Introduction to Translation**  
3 credit(s);  
**Instructor:** STAFF  
**Description:** An introductory course in translation oriented toward the translation of documents written in English into the languages of non-English-speaking residents of our communities. The course includes both theory and supervised practice. As an exercise in re-expressing meaning in a second language, the course provides a solid basis for training in interpreting, as well as for translation.

**TrIn 3101 Introduction to Interpreting**  
3 credit(s);  
**Instructor:** STAFF  
**Description:** A practical and theoretical introduction to interpreting in health, human service, and legal settings. Emphasis on understanding the unique role of the interpreter, current models and modes of interpreting, ethical issues and professional standards of practice, and developing skills in understanding and analyzing spoken language.

**TrIn 3101 Introduction to Interpreting**  
3 credit(s);  
**Instructor:** Newington, Veronica  
**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. Practical and theoretical introduction to interpreting in health, human service, and legal settings.
Emphasis on understanding the unique role of the interpreter, current models and modes of interpreting, ethical issues and professional standards of practice, and developing pre-interpreting skills.

**Style:** Online

**Grading:** See attached syllabus

### TrIn 3102 Consecutive Interpreting
- **3 credit(s);**
- **Instructor:** McCalip, Silvia Elena
- **Description:** A practical course aimed at developing basic levels of proficiency in interpreting in health, human service, and legal settings, with emphasis on interpreting professional/client dialogues. Students develop and refine techniques for consecutive interpreting and are introduced to basic techniques for simultaneous interpreting. Context-based interpreted texts allow students to integrate cultural, ethical, and situational knowledge. Performance assessment through audio- and videotaping with strong emphasis on accuracy.

### TrIn 3900 Topics in Translation and Interpreting
- **3 credit(s), max credits 12, 4 completions allowed;**
- **Instructor:** STAFF
- **Description:** Student may contact the instructor or department for information.

### TrIn 5993 Directed Study
- **1-3 credit(s), max credits 6;**
- **Instructor:** Homler, Scott A
- **Description:** Student may contact the instructor or department for information.

#### University College 20 Ruttan Hall

### UC 1005 Global Perspectives on Higher Education
- **2 credit(s), max credits 4;**
- **Instructor:** Walz, Christine Michelle
- **Description:** Student may contact the instructor or department for information.

### UC 1005 Global Perspectives on Higher Education
- **2 credit(s), max credits 4;**
- **Instructor:** Tokuji, Yuki
- **Description:** Student may contact the instructor or department for information.

### UC 1485 Creativity: Photography
- **4 credit(s); Own camera [35 mm w/adjustable controls preferred], UC; $50 lab fee Credit will not be granted if credit has been received for: PSTL 1485;**
- **Instructor:** Millikan, Jeffrey B
- **Description:** Conceptual, technical, and historical aspects of photography as art. Hands-on experience with camera control, film development, enlarging, and printing in black-and-white. Individual/group critiques of student portfolios. Lab.

### UC 3201 Web Designer Introduction
- **4 credit(s);**
- **Instructor:** Husom, David Harold
- **Description:** See and learn the Web design process by mastering the four phase process of site development: plan, design, produce and publish. Learn design principles, business practices and site analysis. Use industry standard Web design software including Adobe Photoshop, Dreamweaver and Flash to build your own Website. Also get a firm foundation in HTML and CSS. The class includes lectures, exercises, and lab time in a small, hands-on class. No prerequisites or previous experience required. Course notes will be available at the Coffman Bookstore. Students create a website for a final project.
- **Style:** 10% Lecture, 10% Discussion, 50% Laboratory, 5% Student Presentation, 25% Demonstration.
- **Grading:** 75% special projects, 10% quizzes, 5% in-class presentation, 10% class participation.

#### Urban Studies 348 Social Sciences Building

### UrbS 1001W Introduction to Urban Studies: The Complexity of Metropolitan Life
- **A-F only, 3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Brinda, Mark Richard
UrbS 3001W Introduction to Urban Studies: The Complexity of Metropolitan Life
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Brinda, Mark Richard
Description: Student may contact the instructor or department for information.

UrbS 3201 Urban Studies Colloquium
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: STAFF
Description: Sec 003 Corridor and redevelopment studies play an important role in planning, land use and development within large and small communities. This course will explore the inter-relationship that public realm, housing and redevelopment, transportation, economics and social issues play in creating a sense of place among corridors. During this course we will examine each of these elements and how they function within the greater context of a corridor. Mike Darrow is a planner with SEH.

UrbS 3500 Urban Studies Workshop
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: STAFF
Description: URBS 3500 Urban Studies Workshops sec 001 Revitalization: Planning and Implementation, 06:30 P.M. - 09:30 P.M. M (01/22/2008 - 05/09/2008) 3 credits This workshop examines what it takes to revitalize neighborhoods or commercial areas in disadvantaged communities. This is a daunting challenge because of the multiple and inter-related dynamic factors that perpetuate the disadvantaged condition. As a class, we will work to understand the nature of that challenge, and we will explore and discuss a toolkit of analytical methods, development and business strategies, and organizational approaches that can be instrumental in overcoming barriers and fostering positive change. Students will develop a case study that examines a successful revitalization process, and identifies the planning and implementation elements that were most pivotal in that process. Tom Leighton, AICP is a principal planner with the city of Minneapolis. sec -002 Urban Real Estate Development: Fundamentals, Process and Outcome 06:00 P.M. - 09:00 P.M. , W (01/22/2008 - 05/09/2008) , BlegH 240, TCWESTBANK, 3 credits This course will (1) explore and explain disparate disciplines that interact with and depend on each other in urban real estate development while (2) explaining development itself as a holistic, ecological process and profession. The class will first explore the fundamental disciplines involved in the urban real estate development process, including budgeting and finance, property management and asset management. Then the course will examine these fundamentals in simulated real estate developments in a chosen Twin Cities neighborhood. The class will have a chance to explore high profile, ongoing Twin Cities? development(s) through site visit(s). Students must have or be willing to develop a basic comfort with spreadsheets (Microsoft Excel), and must be open to learning more about financial analysis, a critical fundamental language of urban development. Pat Connolly was a housing specialist for Commonbond Housing, and is now the director of housing development for Lutheran Social Services.

UrbS 3871 A Suburban World
3 credit(s);
Instructor: Kayzar, Brenda
Description: Urban Studies has traditionally treated suburbs as an unappealing by-product of urban development. Yet the suburbs dominate U.S. planning and building practices with regard to housing provision and new neighborhood creation. The sheer number of people that now live and work in the suburbs suggests the suburban realm, its form, content, image and troubles should be studied as a separate entity. Despite the long-popular stereotype, the suburbs are not monolithic in style or purpose. Moreover, they have become sites of many urgent battles over both resources and planning practices, notably with regard to land use and economic development. Therefore, it is important to understand how a suburban way of life shapes the values, political ideals and worldviews of its populations. This course will articulate specifics, providing the historical background necessary for the student to understand how this land use came to be, and what forms it currently takes. The primary focus, however, will be on what is occurring in suburbs today and what we might expect to see in the suburban realm of tomorrow.
Style: 60% Lecture, 15% Film/Video, 10% Small Group Activities, 10% Field Trips, 5% Guest Speakers.
Grading: 35% final exam, 55% reports/papers, 10% class participation.
Exam Format: Essay

UrbS 3900 Urban Studies Internship Seminar
A-F only, 2 credit(s), max credits 4;
Instructor: Pentel, Paula R
Description: Student may contact the instructor or department for information.

UrbS 3955W Senior Paper Seminar
A-F only, 2 credit(s); Meets CLE req of Writing Intensive
Instructor: Kayzar, Brenda
Description: Student may contact the instructor or department for information.

UrbS 3993 Urban Studies Directed Study
A-F only, 1-3 credit(s), max credits 6, 3 completions allowed;
Instructor: STAFF
Description: For students with a specific educational objective that cannot be satisfied through regular curriculum (e.g., foreign study) and for honors students to complete an honors opportunity.

Veterinary & Biomedical Sciences

VBS 2022 General Microbiology
A-F only, 3 credit(s);
Instructor: Merica PhD, Rebecca Ruth
Description: VBS 2022 is a general microbiology course designed for non-microbiology majors. Many students who take this course are pursuing careers in the allied health fields or use this course as a survey course to introductory microbiology. This lecture course provides an introduction to the study of microorganisms and covers the basic principles of their growth, metabolism, and genetics. Students will be introduced to the relationships between microbes and humans in areas such as health care, food production, and genetic engineering. The lectures focus on microbes that cause disease and include topics such as pathogenicity, epidemiology, and immunology. Various diseases are presented according to the host organ system most affected. Emerging topics and technologies in microbiology are discussed along with their applications to human health, ecology, and the environment. Grade distribution: 100% Lecture. Work Load: 40 pages reading per week, 6 exams. Grade: 100% exams. Exam Format: Multiple-choice. Course Coordinator: Richard Isaacson
Style: 100% Lecture. Mondays: In-class discussions or review. Wednesdays: In-class lectures or exams. Fridays: Online lectures.
Grading: 20% final exam, 80% additional semester exams.
Exam Format: Multiple choice.

VBS 2032 General Microbiology With Laboratory
A-F only, 5 credit(s); One semester each of college chemistry, biology
Credit will not be granted if credit has been received for: MICB 3301;
Instructor: Merica PhD, Rebecca Ruth
Description: VBS 2032 is a general microbiology course designed for non-microbiology majors. Many students who take this course are pursuing careers in the allied health fields. This lecture/laboratory course provides an introduction to the study of microorganisms and covers the basic principles of their growth, metabolism, and genetics. Students will be introduced to the relationships between microbes and humans in areas such as health care, food production, and genetic engineering. The lectures focus on microbes that cause disease and include topics such as pathogenicity, epidemiology, and immunology. Various diseases are presented according to the host organ system most affected. Emerging topics and technologies in microbiology are discussed along with their applications to human health, ecology, and the environment. The laboratory component of the course provides rigorous training in pathogen handling and identification. Students gain skills in microscopy, aseptic technique, diagnostic testing, and molecular biology. Grade distribution: 60% Lecture, 40% Laboratory. Work Load: 40 pages reading per week, 6 exams, frequent laboratory quizzes, 1 group assignment, 1 laboratory report. Grade: 80% exams, 12% quizzes, 4% group assignment, 4% laboratory report. Exam Format: Multiple-choice. Course Coordinator: Richard Isaacson.
Style: 60% Lecture, 40% Laboratory. Mondays: In-class discussions or review. Wednesdays: In-class lectures or exams. Fridays: Online lectures.
Grading: 20% final exam, 4% special projects, 12% quizzes, 60% additional semester exams, 4% laboratory evaluation.
Exam Format: Multiple choice

Veterinary Clinical Sciences C-339 Veterinary Teaching Hospital

VCS 4992 Directed Readings in Veterinary Clinical Sciences
A-F only, 1-6 credit(s), max credits 12;
Instructor: Dickerson, Erin B
Description: Student may contact the instructor or department for information.

VCS 4992 Directed Readings in Veterinary Clinical Sciences
A-F only, 1-6 credit(s), max credits 12;
Instructor: Modiano, Jaime
Description: 100% Lecture.
VCS 4993 Directed Study in Veterinary Clinical Sciences  
A-F only, 1-6 credit(s), max credits 12;  
Instructor: Modiano, Jaime  
Description: Student may contact the instructor or department for information.

VCS 4994 Directed Research in Veterinary Clinical Sciences  
A-F only, 1-6 credit(s), max credits 12;  
Instructor: Modiano, Jaime  
Description: Student may contact the instructor or department for information.

Veterinary Medicine, Graduate  
455 Veterinary Teaching Hospital

VMed 5080 Problems in Veterinary Epidemiology and Public Health  
A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Bender, Jeff Blaine  
Description: Student may contact the instructor or department for information.

VMed 5101 Molecular and Cellular Basis of Nanoparticle Toxicity  
A-F only, 3 credit(s), max credits 6; Credit will not be granted if credit has been received for: TXCL 5101;  
Instructor: Singh, Ashok K  
Description: Student may contact the instructor or department for information.

VMed 5180 Ecology of Infectious Disease  
3 credit(s); Credit will not be granted if credit has been received for: PUBH 6380;  
Instructor: Singer, Randall  
Description: Student may contact the instructor or department for information.

VMed 5190 Seminar and Presentation Development  
S-N only, 2 credit(s);  
Instructor: Rutherford, Mark Stephen  
Description: Student may contact the instructor or department for information.

VMed 5193 Dairy Decision Making in a Financial Context for Veterinarians  
A-F only, 3 credit(s);  
Instructor: Fetrow, John  
Description: Student may contact the instructor or department for information.

VMed 5210 Advanced Large Animal Physiology I  
1-3 credit(s), max credits 6;  
Instructor: Malone, Erin  
Description: Student may contact the instructor or department for information.

VMed 5232 Comparative Clinical Veterinary Dermatologic Pathology  
S-N only, 1 credit(s), max credits 2;  
Instructor: Torres, Sheila Mello  
Description: Student may contact the instructor or department for information.

VMed 5295 Problems in Large Animal Clinical Medicine/Surgery and Theriogenology  
A-F only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Valberg, Stephanie J  
Description: Student may contact the instructor or department for information.

VMed 5310 Topics in Veterinary Clinical Pathology  
S-N only, 1 credit(s), max credits 2;  
Instructor: Overmann, Jed A  
Description: Student may contact the instructor or department for information.

VMed 5319 Veterinary Gross Pathology  
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Wuenschmann, Arno  
Description: Student may contact the instructor or department for information.

**VMed 5330 Veterinary Descriptive Histopathology**  
1 credit(s), max credits 2;  
Instructor: Armien, Anibal Guillermo  
Description: Student may contact the instructor or department for information.

**VMed 5594 Research in Veterinary Medicine**  
1-4 credit(s), max credits 8;  
Instructor: Sreevatsan, Srinand  
Description: Student may contact the instructor or department for information.

**VMed 5594 Research in Veterinary Medicine**  
1-4 credit(s), max credits 8;  
Instructor: Rutherford, Mark Stephen  
Description: Student may contact the instructor or department for information.

**VMed 5596 Swine Diseases and Diagnostics**  
2-3 credit(s);  
Instructor: Joo, Han Soo  
Description: Student may contact the instructor or department for information.

**VMed 5670 Bovine Surgery Practicum**  
S-N only, 2 credit(s);  
Instructor: Malone, Erin  
Description: This two week intensive course is designed to provide training in ruminant surgery to VMC graduate students and DVMs. The course is unusual in format from most veterinary curriculum offerings and provides an indepth evaluation of food animal surgery principles as well as hands on laboratory components to solidify understanding of the material. Course goal(s): Provide training in ruminant surgery Objectives: Course objectives : 1. To review basic and advanced ruminant surgery principles, including diagnostics and corresponding medical management, in lecture format 2. To practice principles of ruminant surgery in a variety of laboratory formats  
Style: 40% Lecture, 50% Laboratory, 10% Student Presentation. 8-5 M-F for two week blocks (one in fall, one in early spring)  
Grading: 20% reports/papers, 20% special projects, 20% in-class presentation, 20% class participation, 20% laboratory evaluation.

**VMed 5991 Animal Health and Food System Policy and U.S. State government**  
S-N only, 1 credit(s), max credits 2;  
Instructor: Hugoson, Gene  
Description: Student may contact the instructor or department for information.

**VMed 5997 Farm to Table Study Program**  
1 credit(s);  
Instructor: Wells, Scott J  
Description: Student may contact the instructor or department for information.

**VMed 5999 Professional Communications: Agendas, Minutes, Briefing Memos, Decision Memos**  
S-N only, 1 credit(s);  
Instructor: Hueston DVM, William D.  
Description: Student may contact the instructor or department for information.

**VMed 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.

VMed 8220 Advanced Nephrology/Urology Clinics
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Polzin, David J
Description: Student may contact the instructor or department for information.

VMed 8230 Medical Conference
1 credit(s), max credits 2;
Instructor: Lulich PhD, Jody P
Description: Student may contact the instructor or department for information.

VMed 8292 Journal Club: Large Animal Internal Medicine
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Ward, Christie
Description: Student may contact the instructor or department for information.

VMed 8293 Advanced Studies in Nephrology and Urology
A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Lulich PhD, Jody P
Description: Student may contact the instructor or department for information.

VMed 8394 Research in Veterinary Medicine
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Sreevatsan, Srinand
Description: Student may contact the instructor or department for information.

VMed 8492 Seminar: Infectious Diseases and Swine Medicine
1 credit(s), max credits 2;
Instructor: Torremorell, Montserrat
Description: Student may contact the instructor or department for information.

VMed 8550 Veterinary Medicine Seminar
S-N only, 1 credit(s), max credits 2;
Instructor: Goldsmith, Timothy Joseph
Description: Student may contact the instructor or department for information.

VMed 8550 Veterinary Medicine Seminar
S-N only, 1 credit(s), max credits 2;
Instructor: Rutherford, Mark Stephen
Description: Student may contact the instructor or department for information.

VMed 8592 Infectious Disease Journals: Critical Thinking
1 credit(s);
Instructor: Torremorell, Montserrat
Description: Student may contact the instructor or department for information.

VMed 8682 Advanced Large Animal Surgery
A-F only, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: Malone, Erin
Description: Student may contact the instructor or department for information.

VMed 8780 Advanced Avian Critical Care: Principles and Procedures
A-F only, 2 credit(s);
Instructor: Redig, Patrick Thomas
Description: Student may contact the instructor or department for information.

VMed 8793 Seminar: Veterinary Anesthesiology
A-F only, 1-2 credit(s), max credits 4;
VETERINARY POPULATION MEDICINE

VPM 1550 Introduction to the Horse including Care, Handling, and Recognizing Behaviors
A-F only, 1 credit(s);
Instructor: Vallandingham, Kelly L
Description: Student may contact the instructor or department for information.

VPM 1560 Introduction to Horseback Riding and Horse Health
A-F only, 2 credit(s);
Instructor: Vallandingham, Kelly L
Description: Student may contact the instructor or department for information.

VPM 1906W Garbage, Government and the Globe
A-F only, 3 credit(s); Meets CLE req of Environment; meets CLE req of Writing Intensive
Instructor: Singh, Ashok K
Description: Student may contact the instructor or department for information.

VPM 1906W Garbage, Government and the Globe
A-F only, 3 credit(s); Meets CLE req of Environment; meets CLE req of Writing Intensive
Instructor: Singh, Ashok K
Description: Student may contact the instructor or department for information.

VPM 3850W Health and Biodiversity
A-F only, 3 credit(s); Meets CLE req of Environment; meets CLE req of Writing Intensive
Instructor: Craft, PhD, Meggan E
Description: How does the health of the environment affect the health of animals and humans? What role does biodiversity play in this equation, if any? This course explores the inextricable linkages between biodiversity, the health of the environment, and the health of humans and animals. We will explore these relationships, threats to the delicate balance between them, and potential solutions for sustainable ecosystem health.
Style: This course is 3 credits, consisting of 2 credits in class and 1 credit to be completed outside of class. The class time will be approximately 50% lectures and 50% interactive discussion and problem solving.
Grading: Grades will be calculated from quizzes, class participation, and written assignments.

WATER RESOURCES SCIENCE

WRS 8100 Interdisciplinary Seminar in Water Resources
0.5-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Nieber, John Little
Description: Student may contact the instructor or department for information.

WRS 8100 Interdisciplinary Seminar in Water Resources
0.5-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Werne, Josef P
Description: Student may contact the instructor or department for information.

WRITING STUDIES

Writ 1201 Writing Studio
A-F only, 4 credit(s); Placement in Writ 1201 Credit will not be granted if credit has been received for PSTL 1421;
Instructor: STAFF
Description: WRIT 1201 introduces students to general writing strategies encountered at the college level. Through frequent practice and feedback, students learn to see writing as a tool for learning and a vehicle for expression of ideas and informed views. Students also learn a working vocabulary for discussing writing. Typical assignments include informal writing derived from personal experience, response to readings, analysis and evaluation of sources on the web and in print, and formal papers that increasingly make use of sources as well as close reading of texts. The course emphasizes the active practice of writing, from gathering ideas for a paper, through the drafting of papers, to careful editing. Many sections
meet in computer classrooms. Some sections are designated for non-native speakers and are joined to other learning community courses. This course does NOT meet the first-year writing requirement.

**Style:** 10% Lecture, 15% Discussion. Instructor-directed practice of writing related to papers

**Grading:** 80% reports/papers, 20% class participation. Percentages may vary slightly by section. Class participation includes required in-class writing

**Writ 1301 University Writing**
A-F only, 4 credit(s);
Placement in Writ 1301 credit will not be granted if credit already received for freshmen composition courses under the following former designators: ENGC 1011, ENGC 1011H, ENGC 1012, ENGC 1012H, ENGC 1013, ENGC 1013H, ENGC 1014, ENGC 1014H, ENGC 1015, ENGC 1016, RHET 1101
Credit will not be granted if credit has been received for: Writ 1011;
Instructor: STAFF
Description: Writ 1301 fulfills the first-year writing requirement. It involves critical reading, writing, and thinking as students practice some of the types of writing they may expect in their college career such as summaries, essays, academic arguments, bibliographies, and papers built on research. The course helps students develop, at a minimum, an approach to writing that relies on clear statement of a thesis and support of that thesis with appropriate sources and documentation. Time is spent discussing rhetorical elements of writing such as audience, purpose, and argumentative structure. Students also practice steps in the writing process such as invention, research, organization of ideas, paper drafting, revision, and editing. Students report, synthesize, and draw conclusions regarding the significance of what they read. Students become more aware of the rhetorical choices available to them and learn to make appropriate choices. Some sections may be taught in computer classroom. Some sections are offered online. Some sections may include a service-learning component.
Style: 10% Lecture, 35% Discussion. 55% Instructor-directed work on writing assignments, including one-to-one conferences.
Grading: 80% reports/papers, 20% class participation. Percentages may vary slightly by section. Class participation includes required in-class writing.

**Writ 1401 Writing and Academic Inquiry**
A-F only, 4 credit(s);
Placement in Writ 1401 credit will not be granted if credit already received for freshmen composition courses under the following former designators: ENGC 1011, ENGC 1011H, ENGC 1012, ENGC 1012H, ENGC 1013, ENGC 1013H, ENGC 1014, ENGC 1014H, ENGC 1015, ENGC 1016, RHET 1101
Credit will not be granted if credit has been received for: Writ 1011;
Instructor: STAFF
Description: Writ 1401 fulfills the first-year writing requirement. It challenges students to think strategically about developing and communicating ideas within different contexts. Students examine increasingly challenging texts as they apply their writing processes, with feedback from the instructor and peers, in order to craft thesis-driven academic analyses and arguments. Students master the concepts of audience, purpose, and context to demonstrate effective communication both for and beyond an academic audience. Classroom activities include discussion of readings, peer review, informal writing assignments. Students craft focused thesis statements that articulate a clearly reasoned position and use credible evidence to support a sustained argument. Through guided practice, students refine their control over focus, organization, style, diction, and grammar, and use the revision process to achieve their writing goals. Students use University libraries to locate, evaluate, and apply scholarly sources. Some sections may focus on writing with and for new media. Some sections may include a service-learning component.
Style: 10% Lecture, 35% Discussion. Instructor-directed work on writing assignments, including one-to-one conferences.
Grading: 80% reports/papers, 20% class participation. Percentages may vary slightly by section. Class participation includes required in-class writing.

**Writ 1511 Writing Studio I**
A-F only, 1 credit(s);
Instructor: Wright-Peterson, Virginia M
Description: Student may contact the instructor or department for information.

**Writ 1511 Writing Studio I**
A-F only, 1 credit(s);
Instructor: Taniguchi, Yuko
Description: Student may contact the instructor or department for information.

**Writ 1511 Writing Studio I**
A-F only, 1 credit(s);
Instructor: Lemer, Bronson John
Description: Student may contact the instructor or department for information.
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Bruch Jr, Patrick Leonard
Description: Student may contact the instructor or department for information.

Writ 1910W Topics: Freshman Seminar: Fashion to Fashioning: Magazines and Literacy
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Reynolds, Thomas Joseph
Description: Student may contact the instructor or department for information.

Writ 3001 Professional Practices in Scientific and Technical Communication
A-F only, 3 credit(s);
Instructor: STAFF
Description: Intended for students interested or enrolled in the Scientific and Technical Communication major. Introduction to the field and discipline of technical communication. Research origins/history of technical communication. Technical communication in professional world. Focuses on audience, purpose, ethics, global communication, collaboration, usability, and digital writing technologies. Journal articles, student/professional organizations, guest presentations, interviews, digital portfolio. Career assessment inventories, in-class/electronic discussions, oral presentations, research report.

Writ 3029W Business and Professional Writing
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3029W; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Practice writing for various professional purposes/audiences, using appropriate styles, tones, and organizational elements. Potential genres include proposals, reports, web content, email, executive summaries, job search portfolios. Attention to workplace collaboration and broader issues of professional literacy.

Writ 3101W Writing Arguments
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Writ 3102W Public Writing
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Ross Jr, Donald
Description: This course will have three main units that last about one month each. The first concerns critical reading and interpretation of a variety of short public texts including the Declaration of Independence and the federal regulations for subsidized school lunch. The second unit will be about the Central Corridor Light Rail project that runs through campus to St. Paul. You will read and respond to a range of writings about the project including the Met Council's web site and newspaper stories. Finally, you will pick a "small window on a big issue," a manageably small issue concerning the environment, and you will write a formal report on how that issue is being discussed. The course is also built around the Liberal Education Theme of Civic Life and Ethics: You will read and write about local and global issues that involve interactions between citizens and their government. The topics address complex economic, political, and social values and priorities, and they almost always lead to difficult trade-offs that must be negotiated in order to address private and public concerns. Through critical reading and reflective writing you will recognize that public policies in a democratic society rarely involve simple ethical decisions on binary values (just-unjust, good-bad). Instead the involve variables over ranges? pollution could be reduced (but not eliminated), civic participation could be enhanced (but cannot ensure that everyone gets his or her way). They also involve trade-offs, such as that between environmental protection and economic development, or between social justice that places equal opportunities for individuals in tension with the interests of society.
Style: 70% Discussion, 25% Small Group Activities, 5% Student Presentation.
Grading: 85% reports/papers, 10% reflection paper, 5% class participation.

Writ 3152W Writing on Issues of Science and Technology
A-F only, 4 credit(s);
Instructor: STAFF
Description: Ethical, social, and political challenges created by science/technology. Analyzes persuasion strategies through which experts, political decision-makers, and citizens meet these challenges. Bioscience controversies such as cloning, organ transplantation. Controversies over pollution, ozone depletion.

Writ 3152W Writing on Issues of Science and Technology
A-F only, 4 credit(s);
Instructor: Berkenkotter, Carol Ann
Description: Students read books and articles, discuss, and write about a major issues in science and technology. Instructors chose different topics which can include: DNA and the Human Genome; Animal/Human interaction; Global Warming; Alternative Energies; Animal / Human Cloning and Stem-Cell Research; Vaccines from Smallpox to AIDS, Why Civilizations Collapse, etc. This course is for non-specialists.

Writ 3221W Communication Modes and Methods
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Berkenkotter, Carol Ann
Description: Theories/practices of interpersonal, small group, organizational, and scientific and technical communication. Lecture, discussion, simulations, small group work. Students post blogs discussing the reading assignments to the course Website by 10:00 am on the days the class meets. A mid-term and a final exam are also required for this course.

Writ 3257 Scientific and Technical Presentations
3 credit(s);
Instructor: Tofteland, Rachel
Description: Student may contact the instructor or department for information.

Writ 3257 Scientific and Technical Presentations
3 credit(s);
Instructor: Nordin, John P
Description: Student may contact the instructor or department for information.

Writ 3291 Independent Study
1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Writ 3381W Writing and Modern Cultural Movements
A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Reynolds, Thomas Joseph
Description: This course addresses writing that aims to bring about change in culture or society. Early readings and discussion focus on the manifesto, a form employed by Marx, obviously, but also by many modernists involved in artistic movements. We read manifestos by these artists, and then shift to more recent movements of the 1960's and 1970's. Various documents that were important to movements for racial and gender equality, among others, are read as updates on the manifesto form. The later part of the course moves to examine current movements and their written texts. Writing and rhetorical strategies are emphasized throughout the course.
Style: 20% Lecture, 50% Discussion, 25% Small Group Activities, 5% Student Presentation.
Grading: 20% mid exam, 50% reports/papers, 30% special projects.

Writ 3441 Editing, Critique, and Style
A-F only, 3 credit(s);
Instructor: Schuster, Mary Lay

Writ 3511 Communication Methods
A-F only, 3 credit(s);
Instructor: Bruenger, Aaron Michael
Description: Student may contact the instructor or department for information.

Writ 3562W Technical and Professional Writing
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Upper division writing intensive course that includes written/oral communication in professional settings, gathering research, analyzing audience, assessing and practicing multiple genres. Students will draft, test, revise, and present findings in an oral presentation.
Grading: 20% reports/papers, 10% quizzes, 45% written homework, 5% in-class presentation, 10% class participation, 10% other evaluation.
Writ 3577W Rhetoric, Technology, and the Internet
A-F only, 3 credit(s); Meets CLE req of Technology and Society; meets CLE req of Writing Intensive
Instructor: Patterson, Tad
Description: Student may contact the instructor or department for information.

Writ 3671 Visual Rhetoric and Document Design
A-F only, 3 credit(s);
Instructor: Horvath, Barbara Ann
Description: In this course, students learn a system for analyzing and applying principles of visual rhetoric for various media. Activities include analyzing and applying visual strategies to design projects for various audiences and purposes. Topics include reader perception, analysis tools, typography, page layout, and data displays. Students will explore software applications and review strategies for writing for the web.
Style: 30% Lecture, 20% Discussion, 10% Student Presentation, 10% Demonstration, 30% Web Based.

Writ 3672W Project Design and Development
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Moses, Joe
Description: Students study, plan, research, design, and develop technical communication print documents, including documentation, brochures, and newsletters. Introduction to workplace project processes. Emphasizes developing production-quality documents. Learning Outcomes By the end of the course you will be able to? ? Understand the stages of project management: initiating, planning, executing, monitoring/controlling, and closing. ? Apply management principles to achieving strategic communication goals. ? Examine and implement systemized processes for the design of successful information (audience analysis, user scenarios). ? Develop communication products that achieve performance objectives; i.e., analyze communication needs, establish performance objectives, develop a plan for managing the process, develop the components of the planned communication solution, and evaluate the effectiveness of the effort. ? Give and receive feedback designed to improve the clarity, focus, and effectiveness of written documents. Receive instructor feedback on drafts of writing assignments and submit revised assignments based on feedback. Grading Documentation 18% User Manual (18 pages) 18% Promotional Brochure (2 pages) 18% Training Presentation (10 slides) 18% Final paper (3-4 pages) 18% Class Participation 10%
Style: 20% Lecture, 30% Discussion, 20% Small Group Activities, 20% Student Presentation, 10% Demonstration.

Writ 3751W Seminar: Theory and Practice of Writing Consultancy
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Jamsen, Kirsten
Description: This course is a seminar in the theory and practice of teaching writing through one-to-one consultations. Our goal in this seminar is to develop as writers and writing consultants though investigating into, experimenting with, and reflecting upon our own literacy practices; reading carefully and discussing published research and theory as well as examples of our own and other students' writing; posing and exploring--in our discussions, in-class consultations, and writing--questions about writers, writing consulting, and academic literacy; observing, practicing, and reflecting on writing consultancy with one another; designing, conducting, and presenting our own writing center inquiry projects. In addition to challenging you to think critically about both yourself as a writer and a writing consultant, this course will also help you develop practical, flexible, and intentional consulting strategies. Through reflective writing, in-class consultations, class discussions, and collaborative problem-solving sessions, we will learn together how consultants can conduct successful one-to-one conferences with students from a variety of disciplines, backgrounds, and experiences. Ideally, you'll leave this course having grown as both a writer and a writing consultant?and together we will have built a community that supports your continued teaching and learning.
Style: 60% Discussion, 30% Small Group Activities, 9% Student Presentation, 1% Guest Speakers.
Grading: 80% reports/papers, 10% journal, 10% in-class presentation.

Writ 4196 Internship in Scientific and Technical Communication
A-F only, 3 credit(s);
Instructor: STAFF
Description: Internships sites may include the University, industry, or government agencies. Internship proposal, progress report, internship journal (optional), final report with letter from internship supervisor.

Writ 4501 Usability and Human Factors in Technical Communication
A-F only, 3 credit(s);
Instructor: Breuch, Lee-Ann Kastman
Description: Principles/concepts of human factors/usability testing. Developing test plan with research questions, objectives, methods, and measures. Conducting web usability tests in Walter Library with Usability Lab Services. Writing
Writ 4562 International Professional Communication  
3 credit(s);  
Instructor: Duin, Ann Hill  
Description: The increasingly global nature of communication presents new challenges and opportunities as communicators develop content for and work with clients and colleagues from other cultures. This course will increase a student’s skill at communicating with a multicultural audience and working as a member of an international team. This course will include exposure and work with peers and instructors from various parts of the world. Students will understand diverse philosophies and cultures within and across societies by analyzing and discussing dimensional perspectives on international and intercultural professional communication. Comparing different cultural contexts to predict where communication breakdowns may occur and to develop strategies to overcome them. Discussing the typical problems with translation and propose strategies for overcoming them; what kinds of communication technologies work best in different cultures and why; what kinds of changes or modifications have to be made in the management of US firms to accommodate globalization; and how multinational and global organizations deal with intercultural communication problems and opportunities. Identifying and analyzing what kinds of nonverbal cues and social behaviors are important to communicating effectively with people from different cultures. Examining international business trends (e.g., content management, outsourcing, use of open source materials) that affect cross-cultural information development; potential areas of conflict in international cyberspace to anticipate potential cross-cultural misunderstandings; and the role of World English in international technical and business communication and software internationalization. Students will design and develop content, including online materials, for potential distribution and use by a culturally diverse audience of users. Students will identify and discuss globalization with managers of one of the Twin Cities multinational companies and prepare a report on how the company operates in the global business environment; this includes presentation of the report to the company. Note: This course will be a "hybrid" i.e., each week, one session will be in person, on campus, and the other session will be online, mainly to allow for connecting with global audiences.

Writ 4995 Senior Project  
A-F only, 1 credit(s);  
Instructor: Reynolds, Thomas Joseph  
Description: The senior project is a 1-credit requirement to be taken during a student’s senior year. The project addresses a topic in writing studies related to a WRIT course that the student is or has taken. Students generally work with a Writing Studies instructor to complete the project. The nature of the senior project is flexible. It can be a research paper on a proposed topic related to coursework, or it can be a project that involves empirical research and creation of a document (such as a usability report, a technical report, a design, a website, etc.). Students should discuss the nature of the project with the instructor. Students must obtain signature of instructor agreeing to oversee the student’s Senior Project. The senior project will be 1 credit and students must register for it. Students can register any time in the first seven weeks of a given semester. Students must complete a form describing their senior project, naming the faculty member, and get agreement from that faculty member.

Writ 5001 Introduction to Graduate Studies in Scientific and Technical Communication  
A-F only, 3 credit(s);  
Instructor: Gurak PhD, Laura J  
Description: This course is designed for students in the M.S. program in scientific and technical communication (S&TC) and the Graduate Certificate program in technical communication (TC). Students in this class typically have a range of backgrounds, including technical communication, medical/science communication, engineering, software, usability, customer support, writing and communication, marketing, and other areas. Typically, people find their way to technical communication through a variety of paths and experiences; each student will bring a unique perspective to this class. A primary goal of the class is to build on these individual experiences but at the same time provide a common set of readings, concepts, and ideas?both practical and theoretical?that will create a unified base from which to pursue the rest of your master’s/certificate program and future career. Class topics include history of technical writing; writing for specific audiences; usability and research in the technical communication workplace; digital communication practices; software and tools; international communication; writing in regulated environments.  
Style: 20% Lecture, 25% Discussion, 20% Small Group Activities, 20% Student Presentation, 10% Demonstration, 5% Guest Speakers.

Writ 5051 Graduate Research Writing Practice for Non-native Speakers of English  
3 credit(s);  
Instructor: Strain, Kimberley Ann  
Description: Student may contact the instructor or department for information.
Writ 5052 Graduate Research Presentations and Conference Writing for Non-Native Speakers of English
3 credit(s);
Instructor: Holt, Sheryl Lynn
Description: Writ 5052 helps you learn and practice strategies and specific skills for effective delivery of professional, graduate-level presentations to a U.S. audience. The course systematically and sequentially exposes you to the major principles and features of American professional presentations and provides ample opportunities to practice the language and content to most effectively deliver a dynamic presentation. This course uses an action-learning approach with a heavy emphasis on self-assessment and skill building through video demonstrations, videotaping, and coaching. Individual instruction and feedback will be given on videotaped (DVD) presentations and audio taped pronunciation exercises, as needed. Regular attendance, oral participation in classroom presentations and activities, written self-feedback and correction, and informal, impromptu presentations are expected. In addition, some exercises will be assigned for individual practice for accent reduction, as needed. Students select their own field-specific topics for the presentations according to their areas of research or interests. Presentation practice may include skills for persuasive, topic-based, and research-based presentations. Limited discussion will also include writing abstracts for conferences and other writing related to professional presentations. Pronunciation activities and delivery strategies will be specific to non-native speakers of English including cultural analysis, audience awareness, cultural based delivery techniques, enunciation, stress and rhythm, pacing, volume, and non-verbal communication (eye contact, gestures, facial expressions).
Style: 35% Lecture, 35% Discussion. 65% Instructor-directed work on presentation activities and assignments including in-class presentations.
Grading: 10% written homework, 60% in-class presentation, 30% class participation. Percentages may vary slightly by section.

Writ 5112 Information Design: Theory and Practice
A-F only, 3 credit(s);
Instructor: Moses, Joe
Description: Student may contact the instructor or department for information.

Writ 5196 Internship in Scientific and Technical Communication
S-N only, 3-6 credit(s), max credits 6, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Writ 5291 Independent Study, Reading, and Research
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Writ 5671 Visual Rhetoric
A-F only, 3 credit(s);
Instructor: Logie, John
Description: Range/development of visuals, especially those in science/technology. Vocabulary for commenting on, criticizing, and creating visuals.

Writ 5776 The Rhetorical Tradition: Modern Era
A-F only, 3 credit(s);
Instructor: Greene, Ronald Walter
Description: Student may contact the instructor or department for information.

Writ 8012 Applied Research Methods in Writing Studies and Technical Communication
A-F only, 3 credit(s), max credits 6;
Instructor: Haas, Christina
Description: Student may contact the instructor or department for information.

Writ 8510 Seminar in Rhetoric: Writing in the Cloud: Composition in Networked Digital Environments
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Logie, John
Description: Since the 1980s, much of scholarship examining the impact of digital media on processes and practices of written composition has been grounded in an implicit understanding of the computer as a sort of enhanced typewriter. Computers have been seen as more flexible and more efficient than their pre-digital predecessors, but not altogether different in kind. And elements of contemporary laptops make it easy to mistake them for straight-line descendants of the typewriter. The QWERTY keyboard is only the most obvious of the markers of the degree to which digital writing spaces...
are shaped by the mechanical limitations of 19th century writing machines. The advent of cloud computing makes it \textit{if not impossible} to continue to frame shifts in writing technology as a reducible to a relatively straightforward linear progression. 21st Century networked digital tools are often dependent on the use of high-speed connections to the Internet to construct cloud-based simulacra of the physical drives and other writing spaces that we understood to be within our computers. Composers writing on Google's Chromebooks have little "internal" space to work with. Rather, their work occurs not so much on their laps, or desk, but rather in the server spaces assigned to their particular machine. Writers have never been so distant from their own work. Ironically, the work of other writers has never been "closer" than it is to contemporary composers who typically navigate around e-mail, instant messages, and an ever-expanding pool of freely available texts in order to write. This seminar surveys some of the best and most interesting of the very recent scholarship on 21st century writing, rhetoric, and composition in order to better understand how writers are responding to profound shifts in their writing technologies and writing spaces. In keeping with the topic of the class, students will be encouraged to pursue capstone projects that take advantage of the opportunities afforded by networked digital tools and writing spaces.

\textbf{Writ 8560 Seminar in Writing Studies: Writing as Situated Practice and Field Research} Me
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
\textbf{Instructor:} Haas, Christina
\textbf{Description:} Student may contact the instructor or department for information.

\textbf{Writ 8792 Independent Study, Reading, and Research} S-N only, 1-4 credit(s), max credits 12, 12 completions allowed;
\textbf{Instructor:} Berkenkotter, Carol Ann
\textbf{Description:} Student may contact the instructor or department for information.

\textbf{Youth Development and Research} 190 Peters Hall

\textbf{YoSt 1001 Seeing Youth, Thinking Youth: Media, Popular Media, and Scholarship} 3 credit(s);
\textbf{Instructor:} STAFF
\textbf{Description:} Student may contact the instructor or department for information.

\textbf{YoSt 2101 Urban Youth and Youth Issues} 4 credit(s); Meets CLE req of Diversity and Soc Justice US
\textbf{Instructor:} STAFF
\textbf{Description:} Young people in cities around the world are visible objects of interest, concern, and often fear. Their presence makes age noticeable, and often their clothing, hairstyles, body posture, race/ethnicity, and language serve to set them apart, as if they were an alien group, and not our siblings, children or the employee who serves us at a fast food restaurant or helps care for our (grand) parents in a nursing home. In cities, all is compressed and space is more than air or land; it is opportunity, somehow shaping what we do, with whom, how and when. The geography of youth - of how space influences being a teenager is a critical area of study for those interested in the everyday lives of young people. What happens in space; at sites, venues, places is crucial and when there is "more" and all is compressed into an area, much happens "between and among" " lots" goes on, and this too is our interest. The history of adult interest in and concern about and fear of young people is largely the story of urban young people, and it is this history in which our knowledge is grounded. Obviously, there is more than "more" at work. "Urban youth" is used (too) often as a code for social class and race and ethnicity; "city" has continued to mean "them"; difference, "other," too often scary because they are perceived as (and are) "different." To study urban youth is to take on social class, race/ethnicity, style, language, religion, sexual orientation and ability "distinctions" which are inextricable elements in any understanding of youth (moral) panics and, hence, how adults perceive, understand, explain and respond to youth, + 12-22 years old. Youth policy is on category of response, neighborhood police patrol is a specific example; signs on store windows - "only 2 (junior)high school students allowed at any one time" is another. Shopping malls are another, with their intentionally designed environments to keep away young people and to control those who do enter. All of this is ordinary, noticeable, taken-for-granted even; and are other foci of our interest.

\textbf{YoSt 2241 Experiential Learning} 4 credit(s);[1001, 2001] or instr consent Credit will not be granted if credit has been received for: YOST 5241;
\textbf{Instructor:} STAFF
\textbf{Description:} "The best thing for being sad," replied Merlyn, "...is to learn something. That is the only thing that never fails.
You may grow old and trembling in your anatomies, you may lie awake at night listening to the disorder of our veins, ... you may see the world around you devastated by evil lunatics, or know your honor trampled in the sewers of baser minds. There is only one thing for it then - to learn. Learn why the world wags and what wags it. That is the only thing which the mind can never exhaust, never alienate, never be tortured by, never fear or distrust, and never dream of regretting. Learning is the thing for you." T.H. White, The Once and Future King Youth work is often described as 'highly experiential' and transformative. But what does that really mean? What is learning? What makes something transformative? When is learning emancipatory? When is it oppressive? Youth workers understand, sometimes intuitively, that 'learning by doing' makes sense, but why? What does 'doing' really mean? What is learned in youth work? What should be learned? Is all experience equally valid, moral, and educative? What is the difference between active learning and experiential learning? This course will explore the wide range of definitions given to experiential learning and will lay a sound theoretical foundation for understanding it, particularly in the practice of youth work and the field of youth studies. Students will practice applying experiential learning theory across contexts, paying particular attention to culture, class, geography, age, and the formal to informal education continuum.

YoSt 3235 Community Building, Civic Engagement, and Civic Youthwork
4 credit(s);[2001, One basic course in Pol, one basic course in Soc] or instr consent Credit will not be granted if credit has been received for: YOST 5235;  
Instructor: VeLure Roholt,Ross Ronald  
Description: To introduce civic youthwork through two frames of reference: as engagement in community for healthy youth development and as a mechanism to teach civic involvement through community connections.  
Style: 10% Film/Video, 50% Discussion, 40% Small Group Activities.  
Grading: 25% reports/papers, 40% special projects, 10% attendance, 15% in-class presentation, 10% class participation.

YoSt 3240 Special Topics in Youth Studies
2-8 credit(s), max credits 10, 5 completions allowed;[Two social sci courses, exp working with youth] or instr consent Credit will not be granted if credit has been received for: YOST 5240;  
Instructor: STAFF  
Description: This course is designed to give UMN students the opportunity to learn about Hmong history, family, community development, and youth development. The main purpose of this course is to focus on the everyday lives of Hmong youth and the challenges and/or obstacles they face growing up in their community. UMN Hmong professors and community leaders will be invited as guest lecture during the semester. By the end of the semester, students will know about Hmong history, community, family and everyday youth lives, and culture and traditions of being a young Hmong.

YoSt 3291 Independent Study in Youth Studies
1-9 credit(s), max credits 18;  
Instructor: Stein,Jerome A  
Description: Student may contact the instructor or department for information.

YoSt 3291 Independent Study in Youth Studies
1-9 credit(s), max credits 18;  
Instructor: VeLure Roholt,Ross Ronald  
Description: Student may contact the instructor or department for information.

YoSt 3291 Independent Study in Youth Studies
1-9 credit(s), max credits 18;  
Instructor: Billiet,Eric  
Description: Student may contact the instructor or department for information.

YoSt 3291 Independent Study in Youth Studies
1-9 credit(s), max credits 18;  
Instructor: Johnston-Goodstar,Katie  
Description: Student may contact the instructor or department for information.

YoSt 3291 Independent Study in Youth Studies
1-9 credit(s), max credits 18;  
Instructor: Baizerman,Michael Leon  
Description: Student may contact the instructor or department for information.

YoSt 4196 Youthwork Internship
4 credit(s);  
Instructor: STAFF
YoSt 4301 Communicating With Adolescents About Sexuality
3 credit(s);
Instructor: STAFF
Description: The course will provide participants with increased knowledge and practical skills to communicate sensitively and effectively with adolescents and their concerned persons about sexuality in everyday life. Participants will explore a variety of adolescent sexual issues with a focus on healthy adolescent sexual development and diversity. With this perspective as a base, other topics will include gender, body image, sexual values, sexual orientation, sex and cyberspace, laws effecting young people and their bodies, disease concerns, adolescent sexual victimology and offenderology, sexual harassment and professional and ethical boundaries in working with youth. Pertinent theory, research, strategies and experience will be reviewed using historical and contemporary readings, films, daily news media, guest speakers, and participant interaction in a safe, sensitive and even fun atmosphere. Note: This is not a course in human anatomy. It is a course examining the lived experience of young people as sexual beings. Nonetheless, every effort will be made to identify accurate anatomical and physiological language that complements the vernacular young people hear and use. Students will build a lexicon to facilitate talking about sexuality in a wide variety of cultural settings.

YoSt 4315 Youthwork in Schools
4 credit(s); Introductory course in education or instr consent Credit will not be granted if credit has been received for: YOST 5315;
Instructor: Baizerman, Michael Leon
Description: Student may contact the instructor or department for information.

YoSt 4321 Work with Youth: Individual
2 credit(s); 1001 or 2101 or instr consent Credit will not be granted if credit has been received for: YOST 5321;
Instructor: Tilsen PhD, Julie
Description: Student may contact the instructor or department for information.

YoSt 4325 Improving Everyday Youthwork: Practical Program Evaluation
3 credit(s);
Instructor: Mattessich PhD, Paul
Description: Student may contact the instructor or department for information.

YoSt 5235 Community Building, Civic Engagement, and Civic Youthwork
4 credit(s); [2001, one basic course in Pol, one basic course in Soc] or instr consent Credit will not be granted if credit has been received for: YOST 3235;
Instructor: VeLure Roholt, Ross Ronald
Description: To introduce civic youthwork through two frames of reference: as engagement in community for healthy youth development and as a mechanism to teach civic involvement through community connections.

YoSt 5291 Independent Study in Youth Studies
1-8 credit(s), max credits 16;
Instructor: Stein, Jerome A
Description: Student may contact the instructor or department for information.

YoSt 5291 Independent Study in Youth Studies
1-8 credit(s), max credits 16;
Instructor: VeLure Roholt, Ross Ronald
Description: Student may contact the instructor or department for information.

YoSt 5291 Independent Study in Youth Studies
1-8 credit(s), max credits 16;
Instructor: Johnston-Goodstar, Katie
Description: Student may contact the instructor or department for information.

YoSt 5291 Independent Study in Youth Studies
1-8 credit(s), max credits 16;
Instructor: Baizerman, Michael Leon
Description: Student may contact the instructor or department for information.
YoSt 5301 Communicating With Adolescents About Sexuality  
3 credit(s);  
Instructor: STAFF  
Description: The course will provide participants with increased knowledge and practical skills to communicate sensitively and effectively with adolescents and their concerned persons about sexuality in everyday life. Participants will explore a variety of adolescent sexual issues with a focus on healthy adolescent sexual development and diversity. With this perspective as a base, other topics will include gender, body image, sexual values, sexual orientation, sex and cyberspace, laws effecting young people and their bodies, disease concerns, adolescent sexual victimology and offenderology, sexual harassment and professional and ethical boundaries in working with youth. Pertinent theory, research, strategies and experience will be reviewed using historical and contemporary readings, films, daily news media, guest speakers, and participant interaction in a safe, sensitive and even fun atmosphere. Note: This is not a course in human anatomy. It is a course examining the lived experience of young people as sexual beings. Nonetheless, every effort will be made to identify accurate anatomical and physiological language that complements the vernacular young people hear and use. Students will build a lexicon to facilitate talking about sexuality in a wide variety of cultural settings.

YoSt 5315 Youthwork in Schools  
4 credit(s); Introductory course in education or instr consent Credit will not be granted if credit has been received for: YOST 4315;  
Instructor: Baizerman, Michael Leon  
Description: Student may contact the instructor or department for information.

YoSt 5321 Work With Youth: Individual  
2 credit(s); 1001 or 2002W or instr consent Credit will not be granted if credit has been received for: YOST 4321;  
Instructor: STAFF  
Description: Examination of basic assumptions underlying individual work with youth. Attention to special issues and concerns of adolescents and of persons who work with them, especially those who work with youth in one-to-one interactions. Topics include: Context & Meaning, Ways to think about Context, Experience of Self, Interpretations, Assumptions, Personal Style and Intervention, What is the Youth Care Intervention, Influence on Interventions, Overview of Process of Intervention, Multi-Cultural Context of the Care Encounter, Adolescent Developmental Themes, analysis of the process of Intervention, Elements of the process of Intervention. Methods of Instruction: Lecture, interactive instruction, role playing, small group discussion, demonstrations, video, peer evaluations, major project and self evaluation. This class can be taken for graduate or undergraduate credit.  
Style: 40% Lecture, 40% Discussion, 20% Laboratory.  
Grading: 50% reports/papers, 30% class participation, 20% laboratory evaluation.

YoSt 5952 Everyday Lives of Youth  
A-F only, 3 credit(s);  
Instructor: Baizerman, Michael Leon  
Description: Exploration of how youth as idea and as lived-reality are understood in scholarship, public discourse, and professional practice as a first step in building a critical practice of work with and/or on behalf of youth. This class is far less about the science of adolescent development than it is about the lived-experiences of being a kid and doing youth, the lived-body, lived-time, lived-space, lived-relationships, and lived-self of youthhood. We together explore youth as representation, as population, and as individual, thus experiencing the everyday lives of youth in-the-world.  
Style: 80% Discussion, 20% Small Group Activities.  
Grading: 80% reports/papers, 20% class participation. Weekly class attendance is required.

YoSt 5956 Organizational Approaches to Youth Development  
A-F only, 3 credit(s);  
Instructor: Skuzu PhD, Jennifer Ann  
Description: Student may contact the instructor or department for information.

YoSt 5960 Seminar in Youth Development Leadership  
S-N only, 1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Stein, Jerome A  
Description: Student may contact the instructor or department for information.

YoSt 5962 Leadership Field Experience: Youth Development  
S-N only, 4 credit(s);  
Instructor: Stein, Jerome A  
Description: Student may contact the instructor or department for information.
 YoSt 5972 Education in the Community
 3 credit(s);
Instructor: Stein, Jerome A

Description: What does it mean to put community at the heart of education and learning? Drawing on examples of education in the community from a wide range of perspectives including social settlements, indigenous communities, Talmudic scholarship, history, and philosophy, new ideas about education and community will be presented, and new approaches to educational practice will be explored.

This information is subject to change. Access the most current information in the online Course Guide at http://onestop.umn.edu. IMPORTANT: Before you attend the first class, verify the room location in the online Class Schedule.