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: Please note that this course does not require the purchase of a textbook or additional course materials. 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: Simpson, Scott W
Description: Please note that this course does not require the purchase of a textbook or additional course materials. 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.

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 1600 The Future Physician I: Medicine in the 21st Century
A-F only, 1 credit(s);
Instructor: Slattengren DO, Andrew Heslin
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: View our Youtube commercial for this course - http://youtu.be/_BoNu2AO-Fw. Registration for this course requires completion of AHS 1600 or AHS 1601, instructor approval and a permission number. Requests to Tricia Todd, MPH, course instructor, at todd0002@umn.edu. An essential component of your application to medical school is experience in a health care setting. This course requires you to complete 35 hours of volunteer experience in a setting that
employs physicians and serves patients. In addition, you will complete a medical school application plan and gain additional insight into your own fit with the field of medicine.

**AHS 2300 Orientation to Clinical Research**
- **A-F only, 1 credit(s);**
- **Instructor:** Beniak DNP, Judith Anne
- **Description:** Are you interested in learning about and gaining clinical research experience? To apply, go to this link https://umn.qualtrics.com/SE/?SID=SV_8k6vY7APGPFNYUd. By taking the AHS 2300 course in fall you will: Learn about clinical research? Meet a range of faculty with clinical research experience? Participate in 15 hours of a field experience in a clinical research setting? Develop a research proposal, with potential to participate in an ongoing clinical research opportunity in spring 2015.* This option may include the opportunity to study abroad in Denmark, and conduct clinical research there. If you are interested in this option, please answer accordingly on the application survey (linked below). The course is taught and coordinated by Russell Luepker, MD, Judy Beniak, DNP, MPH, RN and Tricia Todd, MPH. The class meets 8 times in the fall semester, and you participate in 15 additional hours of a clinical research field experience as part of the course. To apply to this class you must meet the following requirements: ? A cumulative undergraduate GPA of 3.5 or above. ? An interest in clinical research. ? Past experiences in a health setting: volunteer, internship, or paid work. ? A career interest in a health profession such as dentistry, medicine, nursing, pharmacy or public health. ? Enough flexibility in your schedule to allow 15 hours in a field placement during the fall semester. To apply, go to this link https://umn.qualtrics.com/SE/?SID=SV_8k6vY7APGPFNYUd. The course is offered by invitation only to 10 qualified students. We will be reviewing applications on a rolling basis. Some students may be invited for an additional in-person interview. If you are accepted into the course, you will receive a permission number which will guarantee your admittance into the class. For questions, contact HCC office 612-624-6767.

**AHS 2400 Writing a Personal Statement**
- **S-N only, 1 credit(s);**
- **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:** Duke, Gordon Leon
- **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:** Sheibany, Iman
- **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:** Tang, Chao
- **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 2050 Introduction to Financial Reporting
A-F only, 4 credit(s); Soph Credit will not be granted if credit has been received for: APEC 1251;
Instructor: Zhang, Gaoqing
Description: Student may contact the instructor or department for information.

Acct 2050H Honors: Introduction to Financial Reporting
A-F only, 4 credit(s);
Instructor: Ma, Paul
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: Forester, Clayton L
Description: Student may contact the instructor or department for information.

Acct 3001 Introduction to Management Accounting
A-F only, 3 credit(s);
Instructor: Batina, Tom
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
Acct 5101 Intermediate Accounting I
A-F only, 4 credit(s);
Instructor: Biondich, Nick E
Description: Student may contact the instructor or department for information.

Instructor: Zhang, Ivy Xiying
Description: Student may contact the instructor or department for information.

Acct 5101 Intermediate Accounting I
A-F only, 4 credit(s);
Instructor: Iselin, Michael
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: Forester, Clayton L
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  
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 8002 Empirical Research-Capital Markets  
4 credit(s), max credits 8;  
Instructor: Zhang, Ivy Xiying  
Description: Student may contact the instructor or department for information.

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

Addiction Studies  
Credit Certificate Prog/College of Continuing Edu

AddS 5011 Foundations in Addiction Studies  
A-F only, 2 credit(s);
Instructor: Vu, Thanh Van Ngoc
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 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: 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 5041 Methods and Models I: Motivational Counseling
A-F only, 2 credit(s);
Instructor: Weigelt, Jennifer E
Description: Student may contact the instructor or department for information.

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

AddS 5061 Foundations of Group Work
A-F only, 3 credit(s);
Instructor: Rohovit, Julie L
Description: 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 of his/her environment. Social, environmental, and multicultural factors that contribute resources for these clients.

**Style:** Online

**Grading:** See attached syllabus

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**AddS 5081 Multicultural Foundations of Behavioral Health**

- A-F only, 3 credit(s);
- **Instructor:** Heu, Melanie
- **Description:** Student may contact the instructor or department for information.

**AddS 5081 Multicultural Foundations of Behavioral Health**

- A-F only, 3 credit(s);
- **Instructor:** Wamsley, Debra S
- **Description:** 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:** Wawro, George
- **Description:** Core addictions counseling functions including clinical assessment, case management, documentation treatment planning, and ethical issues. Students begin process of securing internship.

**AddS 5996 Internship in Substance Abuse Counseling**

- S-N only, 1-8 credit(s), max credits 8, 4 completions allowed;
- **Instructor:** Spence, Michaelene Rose
- **Description:** Student may contact the instructor or department for information.

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**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

**AEM 3031 Deformable Body Mechanics**

- A-F only, 3 credit(s);
- **Instructor:** Hesla, Todd
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);[3101 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: Posbergh,Thomas Alfred
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 4581 Mechanics of Solids
3 credit(s);
Instructor: James,Richard D
Description: This course is a basic course in Solid Mechanics and an introduction to Continuum Mechanics. The course will be completely self-contained and there is no required textbook. Reference to relevant works and original sources will be announced during class. The goal is to transmit an "insider's view" of solid mechanics: what is really behind the choice of equations and methods? What is the connection with experiment? What can you do with it? The exposition in this course will be quite traditional, but examples will be chosen to reflect modern trends in science and technology. Outline 1. One-dimensional continuum mechanics (a) Kinematics and the balance of mass (b) Forces and the balance of momentum (c) Balance of energy (d) Work, energy and stability (e) Linear wave propagation in bars (f) Nonlinear wave propagation: shocks in solids (g) Thermoelastic eects in bars 2. Strings and rods (a) Equations of motion of a string (b) Euler-Bernoulli theory (c) Stability and buckling 3. Three dimensional elasticity (a) Kinematics of homogeneous deformations (b) Strain and principle strains (c) Stress and principle stresses (d) The linear and nonlinear theories of elasticity 4. Fracture mechanics (a) Fracture criteria (b) Fracture tests 5. Applications: shape memory materials, DNA as a rod, viruses, MEMS devices, energy conversion
Style: 100% Lecture.

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

AEM 4602W Aeromechanics Laboratory
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Shield,Thomas William
Description: Student may contact the instructor or department for information.
AEM 4796 Professional Experience
A-F only, 3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

AEM 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
A-F only, 3 credit(s);
Instructor: Candler, Graham Vardy
Description: Student may contact the instructor or department for information.

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

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

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

AEM 5501 Continuum Mechanics
3 credit(s);
Instructor: 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: 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 8423 Convex Optimization Methods in Control
A-F only, 3 credit(s);
Instructor: Seiler Jr, Peter J
Description: Student may contact the instructor or department for information.

AEM 8442 Navigation and Guidance Systems
A-F only, 3 credit(s);
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
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Aerospace Studies  3 Armory

Air 1000 Leadership Laboratory
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Peterson, Major Chris
Description: Student may contact the instructor or department for information.

Air 1104 Introduction to the Air Force Today I
A-F only, 1 credit(s);
Instructor: Johnson, Christopher Mitchell
Description: Student may contact the instructor or department for information.

Air 1204 History of Airpower and Communication Skills
A-F only, 1 credit(s);
Instructor: Hoopes, David A
Description: Student may contact the instructor or department for information.

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, officerism, 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 an opportunity to apply the leadership and management principles of this course. Target audience is first semester seniors preparing to enter active duty as commissioned Second Lieutenants in the US Air Force. Classes are a combination of lecture and guided discussion. Class
time: 50% lecture, 30% discussion, 20% student briefings. Work load: 70 pages of reading per week, 2 exams, 3 papers, 2 oral presentations. Exam format: essay, short answer, matching.

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

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

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

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**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.

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**Afro 1902 Freshman Seminar: Social & 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.

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**Afro 3103 World History and Africa**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: AFRO 5103;

**Instructor:** Atkins, Keletso E

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

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**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 in the United States through Blues to the first form of Jazz in New Orleans. We will continues with Swing and the Modern Forms of Bebop, and Cool, Neo-Classicism and Jazz Hip Hop. Because the course focuses primarily on the social, economic, and political impact on jazz, and vice versa, it is a perfect course for the musician and the non-musician. Musicians and non-musicians will appreciate the developmental aspects of this once brand-new musical form and the ways these musical elements evolve when music and culture interact.. Students will finally gain an appreciation of Jazz as a musical representation of the social history of the United States.

**Style:** Online

**Grading:** See attached syllabus

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**Afro 3112 In the Heart of the Beat: the Poetry of Rap**

A-F only, 3 credit(s);

**Instructor:** Coleman PhD, Taiyon J

**Description:** Many critics and scholars assert that rap/poetry is the emergent African American literary art form of the postmodern age, which conveys the social, economic, and political experiences of lived peoples. Its roots reside in African and African American oral (vernacular) tradition, but its bloodline can also be traced back through the pages of words set down by African America's most significant poets. The focus of this course is on the speech of rap, the narrative of rap, and the poetics of the words of rap. The course is not necessarily about the pop culture icons that produce and/or profit from rap. The class pedagogy, curriculum, and assessment will proceed from the belief that pulsating at the core of rap is a
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; meets CLE req of Historical Perspectives
Instructor: Onishi,Yuichiro
Description: Throughout modern history, the critical perspectives of Black intellectuals, writers, poets, artists, and musicians exercised tremendous shaping and explanatory power. In dynamic and flexible ways, their ideas about freedom have moved across time and space to shape the movement of world history. This course will take up the challenge of investigating the vitality and quality of their visions of liberation, especially how Afro diasporic thinkers and activists have come to develop theory and practice against the interlocking systems of domination. Their critiques of the fundamental problems of the modern world (white supremacy, colonialism, and heteropatriarchy) have at once exceeded the available political idioms and languages and boundaries of nation-states and energized collective action at the grassroots. The analysis of this recursive movement between the local and the global is foundational to this course. In this course, we will refer to the Afro diasporic mode of producing critical reason as Black internationalism to unpack the dynamism of social and intellectual movements in the African diaspora and unlikely places, such as India, Japan, and China. An emphasis will be placed on how Black intellectual-activists have responded to such world historic developments as European colonialism in Africa, the Americas, and Asia, two World Wars, the Cold War, post-1945 decolonization, and other revolutionary struggles around the world to shape the politics of the African diaspora locally and transnationally. Combining mini-lectures and a reading-seminar format, the course introduces students to key texts and cutting-edge scholarship in the study of Black internationalism. To this end, thus, each student will lead and facilitate discussion twice during the semester in pairs and complete two critical synthesis assignments (three-pages in length). The final project (10-pages in length) will involve historical research using primary sources. Students who are interested in the international study of African American history, Black radicalism, and social movements are encouraged to take this course.

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 3433 Economic Development in Contemporary Africa
3 credit(s); APEC 1101 or ECON 1101 Credit will not be granted if credit has been received for: APEC 3061; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Okediji,Tade O
Description: This course examines major socio-economic challenges that confront post-independent sub-Saharan African countries in their quest for sustainable economic development and growth. We will discuss topics such as causes of persistent poverty and inequality; the role of institutions and multinational agencies, as well as governance in African societies. Finally, we will examine the prospects for development and growth in the 21st Century. This course is reading intensive.

Afro 3436 Contemporary African Conflicts: From Somalia to South Africa
3 credit(s); Credit will not be granted if credit has been received for: HIST 3436;
Instructor: STAFF
Description: In terms of number of lives lost, the 20th century was the deadliest in human history, and much of this destruction and tragedy took place in Africa. Why? This course draws on some of the newest works of African history to probe. The causes of present-day patterns of conflict and human rights violations. The course is organized around both case studies and historical patterns. We will examine case studies from Rwanda, Congo, Sudan, Somalia, Nigeria and Sierra Leone. Moving back into the past, we will examine patterns of exercising power, managing conflict, dealing with diversity and difference, distributing resources, addressing inequality and punishing crime. We will consider how such patterns have developed and changed over time, how they have been affected by internal and external influences, and what roles they play in promoting or reducing conflict today.
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 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 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 4231 Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S.
3 credit(s); Credit will not be granted if credit has been received for: AMIN 4231;
Instructor: Brewer, Rose Marie
Description: This course is designed to familiarize students with the history of U.S. public policy development and social relations across racial-ethnic-nation cultures. The focus will be on the United States, but recent developments from the global context will be incorporated for comparative purposes. In this course we will examine the structural and institutional conditions through which people of color have been systematically marginalized, and how diverse populations have fought for and won or lost policy change. The course will help students better understand and interpret the "dominant paradigm" in which public policy has been set. Then, we will examine how and why this paradigm has shifted over time, and what the current prospects are for policy transformation in the domestic and global arenas.
Style: 20% Lecture, 40% Discussion. community research
Grading: 20% final exam, 30% reports/papers, 20% class participation, 30% other evaluation. community research
Exam Format: take-home

Afro 4910 Topics in African American and African Studies: Policing America
1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Phelps, Michelle Suzanne
Description: This course is an in-depth sociological analysis of the origins, composition, and effects of policing in contemporary U.S. society. Throughout the course, we focus on using a social science lens to understand what policing is and how it influences social life. We will pay particular attention to the ways in which racial inequalities are reflected in and reshaped by policing practices. The course material is divided into three units. In the first, we cover the early history of formal policing in the U.S. and contemporary developments, including broken windows policing and the war on drugs. We will read two ethnographies of policing in an urban locale and a rural town to better understand the lived experiences of the police and the policed. We then turn to the police as an organization, looking at the ways in which race, gender, and other social characteristics shape police work. In the third unit, we turn to how the logic of policing filters through and beyond the state in schools, welfare offices, the war on terror, and mass technological surveillance. Throughout the course, students
will also use ethnographic tools to study policing themselves in local Minneapolis neighborhoods.

**Style:** 60% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities.

**Grading:** 30% final exam, 40% reports/papers, 20% quizzes, 10% class participation.

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**Afro 4991W Thesis Research and Writing**

- A-F only, 3 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Onishi, Yuichiro
- **Description:** Student may contact the instructor or department for information.

**Afro 5103 World History and Africa**

- A-F only, 3 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: AFRO 3103;
- **Instructor:** Atkins, Keletso E
- **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:** Onishi, Yuichiro
- **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 5866 The Civil Rights and Black Power Movement, 1954-1984**

- A-F only, 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.

**Afro 8910 Topics in Studies of Africa and the African Diaspora**

- 3 credit(s), max credits 9, 3 completions allowed;
- **Instructor:** Mathieu, Saje M
- **Description:** Student may contact the instructor or department for information.

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**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**

- 3 credit(s);
- **Instructor:** Swiggum, James Frederick
- **Description:** Student may contact the instructor or department for information.

**AFEE 2221 People Skills for Leadership**

- A-F only, 3 credit(s);
- **Instructor:** Lorensen, Marianne Elizabeth
- **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 5235 Advanced Supervised Agricultural Experience Programs
2 credit(s);
Instructor: Greiman, Brad
Description: Student may contact the instructor or department for information.

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

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

AFEE 5697 Teaching Internship: School and Classroom Setting
2 credit(s);
Instructor: 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 5993 Directed Study in Agricultural Education and Extension
1-9 credit(s), max credits 9, 1 completion allowed;
Instructor: Lorensen, Marianne Elizabeth
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 1660W First-Year Colloquium/Experience in Agroecosystems Analysis
A-F only, 2 credit(s); Meets CLE req of Writing Intensive
Instructor: Smith, Kevin Paul
Description: Student may contact the instructor or department for information.

Agro 3305 Agroecosystems of the world
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Brakke, Mary Patricia
Description: Agroecosystems are defined by the natural environment, interactions of people with their environment and with others as they engage in food production. Throughout this course we use distance technology to speak with producers, consumers and scientists around the world to learn about agroecosystems. Videos, photos, and GIS databases
augment our conversations with imagery at the local and global scale. These experiences will help students understand how the environment shapes food production practices and also how these practices impact the environment. We will consider issues and challenges to food production including climate change, the availability of water, the role of women and the role of governments. Students will be exposed to diverse perspectives on food production and participate in cross-cultural communication.

**Style:** 30% Lecture, 10% Film/Video, 10% Discussion, 20% Small Group Activities, 5% Student Presentation, 5% Guest Speakers, 20% Web Based.

**Grading:** 10% final exam, 40% reports/papers, 10% special projects, 10% quizzes, 10% reflection paper, 10% in-class presentation, 10% class participation.

**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**

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 4605 Strategies for Agricultural Production and Management**

3 credit(s);

**Instructor:** Porter, Paul M

**Description:** This course provides students with information and tools necessary to make informed land management decisions in ever-evolving economic, policy, and climate environments. We will evaluate the hows, whats and whys of crop management by solving real-world problems that agricultural professionals face. The focus will be state-of-the-art production and management practices for the major agricultural crops in Minnesota. Solving these problems will connect disciplines as diverse as agronomy, soil science, plant biology, entomology, plant pathology, ecology, and economics. Lectures will feature agricultural professionals and experts; a “lab” component will provide hands-on experience with modern equipment and data interpretation. Students can expect to develop their quantitative, communication, and critical evaluation, which will enhance future job prospects.

**Style:** 25% Lecture, 25% Discussion, 25% Laboratory, 10% Small Group Activities, 5% Student Presentation, 10% Guest Speakers.

**Grading:** 30% reports/papers, 30% laboratory evaluation.

**Agro 4660 Senior Capstone**

A-F only, 2 credit(s);

**Instructor:** Muehlbauer, Gary John

**Description:** This course examines the complexities of agricultural issues through a series of discussions. The course also engages students in exercises and discussions that integrate previous educational situations. This course is linked to
undergraduate internships and other experiential learning opportunities such as thesis or direct studies and service learning. Written and oral assignments are based on internships or other learning experiences.

**Style:** 10% Lecture, 90% Discussion.
**Grading:** 50% reports/papers, 30% in-class presentation, 20% other evaluation. class discussion

### Agro 4888 Issues in Sustainable Agriculture
2 credit(s);
**Instructor:** Sheaffer,Craig Charles
**Description:** Study the social, economic, political and environmental aspects of a sustainable agriculture through discussions with experts in the field. Specific topics can include: the history of agriculture and the family farm, government farm policy, the importance of biodiversity for healthy landscapes, rural communities, quality of life, community supported agriculture, organic agriculture, landscape health and non-profit organizations. Teaching approaches will include student, faculty and producer-led discussions. The course will include on-farm visits. Target audience: non-majors and majors interested in sustainable agriculture.

### Agro 4888 Issues in Sustainable Agriculture
2 credit(s);
**Instructor:** Murray,Helene
**Description:** Study the social, economic, political and environmental aspects of a sustainable agriculture through discussions with experts in the field. Specific topics can include: the history of agriculture and the family farm, government farm policy, the importance of biodiversity for healthy landscapes, rural communities, quality of life, community supported agriculture, organic agriculture, landscape health and non-profit organizations. Teaching approaches will include student, faculty and producer-led discussions. The course will include on-farm visits. Target audience: non-majors and majors interested in sustainable agriculture.

### Agro 5311 Research Methods in Crop Improvement and Production
S-N only, 1 credit(s);
**Instructor:** Anderson,James Allan
**Description:** Student may contact the instructor or department for information.

### Agro 5431 Applied Plant Genomics and Bioinformatics
3 credit(s);
**Instructor:** Hirsch,Candice N
**Description:** Student may contact the instructor or department for information.

### Agro 5431 Applied Plant Genomics and Bioinformatics
3 credit(s);
**Instructor:** Hirsch,Candice N
**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 5999 Special Topics: Workshop in Agronomy: Biocomputing Data Skills
1-6 credit(s), max credits 6, 3 completions allowed;
**Instructor:** Silverstein PhD,Kevin A
**Description:** Student may contact the instructor or department for information.

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

### Agro 8270 Graduate Seminar
Akkadian  

Akkadian 5011 Elementary Akkadian I  

3 credit(s);  
**Instructor:** von Dassow, Eva  
**Description:** Akkadian, comprising the Old Akkadian, Assyrian, and Babylonian dialects, was the predominant Semitic language of ancient Mesopotamia. It was written in the cuneiform script, and is attested in writing from the third millennium BCE, until the early first millennium CE. Akkadian was adopted as a written language in many regions beyond Mesopotamia, from Iran to Anatolia and even Egypt, in certain periods. This course is the first half of a two-semester introduction to the Akkadian language and the cuneiform script. The Old Babylonian dialect will serve as the basis for instruction in the language, using J. Huehnergard's "Grammar of Akkadian". Students will also learn the cuneiform script, using Rene Labat's "Manuel d'epigraphie akkadienne." The class will read selections from texts of various genres, including the Laws of Hammurabi, the Descent of Ishtar, letters and contracts, and Assyrian royal inscriptions. Examination of actual artifacts inscribed in cuneiform will be part of the course.  
**Style:** 45% Lecture, 50% Discussion, 5% Demonstration.  
**Grading:** 30% final exam, 25% quizzes, 25% written homework, 20% class participation.  
**Exam Format:** Translation, vocabulary and grammar exercises  

American Indian Studies  

AmIn 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.  

AmIn 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.  

AmIn 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.  

AmIn 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

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**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:** Bendickson, Wayne Joseph

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

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**Amln 3107 Structure of Anishinaabemowin, the Ojibwe Language**

- A-F only, 3 credit(s);
- 3103 Credit will not be granted if credit has been received for: AMIN 5107;

**Instructor:** Nichols, John David

**Description:** Analysis of grammatical structures of Anishinaabemowin.

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**Amln 3141 American Indian Language Planning**

- A-F only, 3 credit(s);
- 3103 or 3123 Credit will not be granted if credit has been received for: AMIN 5141;

**Instructor:** Nichols, John David

**Description:** In this course on the maintenance and revitalization of North American indigenous languages, our main objective is to prepare for work in American Indian communities on language issues through language planning activities, language documentation (preparation of grammars, dictionaries, and texts), and education (preparation of pedagogical materials, design of curriculum, and teaching). Among the topics to be covered are: overview of American Indian languages; introduction to American Indian language revitalization; language shift and language death; first nation, state/provincial, federal, and international perspectives on language rights and policies; introduction to language planning; language documentation: dictionaries, grammars, and texts; lexical innovation; literacy and orthographic standardization; second language acquisition and teaching; preparing pedagogical materials; teacher training; community activities; proposal writing.

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

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**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.

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**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.

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**Amln 3301 American Indian Philosophies**

- 4 credit(s);
- Meets CLE req of Arts/Humanities;
- Meets CLE req of Diversity and Soc Justice US

**Instructor:** STAFF

**Description:** The purpose of this course is to introduce students to the philosophical thought and spiritual beliefs of native
peoples of North America. Students will examine a broad spectrum of issues which influence the worldview of native people on this continent, including European contact and thought. Students may find some of the issues to be controversial and personally challenging, however, a thorough discussion of the impact of European influences is important to understanding native people’s resistance and survival. Finally, students will also explore the ways in which 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.

Amln 3312 American Indian Environmental Issues and Ecological Perspectives
3 credit(s); Meets CLE req of Environment
Instructor: Carroll, Clint
Description: This is a survey course devoted to understanding American Indian / First Nation environmental issues broadly speaking in both the United States and Canada. The class will encourage you to think critically and responsibly about a variety of contemporary debates and political topics, including off-reservation hunting and fishing, the protection of sacred sites on public lands, romanticized stereotypes, food sovereignty, and environmental justice for Native communities. We will also explore the unique perspectives of American Indian / First Nation peoples in the context of traditional ecological knowledge and practices, and how they both contrast with and complement Western science. We will view these topics through the lens of political ecology, an approach to environmental studies that emphasizes the influence of social, political, economic, and legal forces and institutions on environmental issues. As such, the course will stress the importance of understanding historical and contemporary American Indian environmental matters in the contexts of colonial histories and tribal sovereignty.

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.

Amln 3872 American Indian History: 1830 to the Present
3 credit(s); Credit will not be granted if credit has been received for: HIST 3872;
Instructor: O’Brien, Jean María
Description: How did American Indian nations navigate the turbulent nineteenth and twentieth centuries that brought a flood of intruders into their homelands and remake themselves into the vibrant and richly diverse peoples that they are in the present? Beginning with the turmoil surrounding Indian Removal policy in the 1830s, and extending into the present-day struggles of Indian nations to control their own destinies, this course serves as an introduction to American Indian history from 1830 to the present. Touching on such themes such as cultural resistance and political resurgence in the face of U.S. colonialism, we will focus on the interface between the development of Federal Indian policy and American Indian resistance to U.S. initiatives as a unifying theme, and we will also consider major shifts in the nature of American Indian sovereignty into the present. This course stresses the integrity and adaptability of American Indian societies, and the centrality of ever-emergent American Indian identity to the experiences of Indian people. Particular topics include: Indian Removal and the concept of Indian Territory; Sovereignty: What does it mean? Encounters, east and west; Reservation Life; Pan-Indianism; John Collier and the Indian New Deal; the Indian Claims Commission; Termination and Relocation; Self-Determination and Indian Activism. Readings are designed to complement course session, and include documents, a monograph, a novel, and compiled oral histories of Indian peoples.
Style: 30% Lecture, 20% Film/Video, 30% Discussion, 20% Small Group Activities.
Grading: 40% mid exam, 40% reports/papers, 10% quizzes, 10% class participation.
Exam Format: Essay

Amln 3876 American Indian Education
3 credit(s);
Instructor: Child, Brenda J
Description: Educational processes in American Indian cultures; history of school programs established for tribes by missionaries and the U.S. and Canadian governments; the importance of boarding schools in shaping the lives, families, communities, and educational expectations of Indian people in the late-19th and early-20th centuries.

Amln 4231 Color of Public Policy: African Americans, American Indians, Asian Americans, & Chicanos in the U.S.
3 credit(s); Credit will not be granted if credit has been received for: AFRO 4231;
Instructor: Brewer, Rose Marie
Description: This course is designed to familiarize students with the history of U.S. public policy development and social relations across racial-ethnic-nation cultures. The focus will be on the United States, but recent developments from the
global context will be incorporated for comparative purposes. In this course we will examine the structural and institutional conditions through which people of color have been systematically marginalized, and how diverse populations have fought for and won or lost policy change. The course will help students better understand and interpret the "dominant paradigm" in which public policy has been set. Then, we will examine how and why this paradigm has shifted over time, and what the current prospects are for policy transformation in the domestic and global arenas.

**Style:** 20% Lecture, 40% Discussion. community research

**Grading:** 20% final exam, 30% reports/papers, 20% class participation, 30% other evaluation. community research

**Exam Format:** take-home

### AMin 5107 The Structure of Anishinaabemowin, the Ojibwe Language

- **A-F only, 3 credit(s);** 3104
- **Credit will not be granted if credit has been received for:** AMIN 3107;
- **Instructor:** Nichols, John David
- **Description:** Student may contact the instructor or department for information.

### AMin 5141 American Indian Language Planning

- **A-F only, 3 credit(s);** 3103 or 3123 or instr consent
- **Credit will not be granted if credit has been received for:** AMIN 3141;
- **Instructor:** Nichols, John David
- **Description:** In this course on the maintenance and revitalization of North American indigenous languages, our main objective is to prepare for work in American Indian communities on language issues through language planning activities, language documentation (preparation of grammars, dictionaries, and texts), and education (preparation of pedagogical materials, design of curriculum, and teaching). Among the topics to be covered are: language endangerment as a global issue; overview of American Indian languages; introduction to American Indian language revitalization; language shift and language death; first nation, state/provincial, federal, and international perspectives on language rights and policies; introduction to language planning; language documentation: dictionaries, grammars, and texts; lexical innovation; literacy and orthographic standardization; second language acquisition and teaching; preparing pedagogical materials; teacher training; community activities; proposal writing. Work at the graduate level in this combined courses includes additional reading and a major research paper or project in place of the term paper.
- **Style:** 30% Lecture, 30% Discussion, 10% Small Group Activities, 30% Student Presentation.

### 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 5920 Topics in American Indian Studies

- **A-F only, 3 credit(s), max credits 12, 4 completions allowed;**
- **Instructor:** Wilkins, David E
- **Description:** Student may contact the instructor or department for information.

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### American Sign Language

#### 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: 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: Caven, Janet 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: 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: Vintinner, Ishaa
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: Shannon, Shawn Raymond
Description: Student may contact the instructor or department for information.
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: Americans Abroad: Rethink Travel, Culture, Empire
3 credit(s);
Instructor: Powell, Elliott Hunter
Description: Student may contact the instructor or department for information.

AmSt 2011 The United States since September 11
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: May, Elaine Tyler
Description: This course asks the questions: What was the impact of the events of September 11, 2001? What changed within the nation and the world? Was 9/11 a "watershed" moment? To answer this question we will consider the events and developments in the decades prior to 9/11, consider the similarities and differences between the Cold War and the War on Terror, and examine cultural, social and political transformations over several decades before and since 9/11.
Requirements include weekly readings, quizzes and in-class assignments, and three exams.

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

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: Cornell, Alikwe J
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: Karjanen, David J
Description: Globalization, National Security/Terrorism, Economic Crises, Migration, the Global Media? How does America address these challenges moving forward in the 21st Century? How have events such as 9/11 and the global impact of the US military affected America's relationship with the rest of the world? This course examines these questions and provides a range of theoretical approaches to understand America's complex relationship to global forces today. Students taking this course will gain an interdisciplinary, topical approach to understanding these issues, learn about important public policy debates, and how the perception of the United States around the world varies based on politics, culture, and historical factors. Particular focus on the impact of the US Military and US multinational corporations globally, and immigration to the United States.
Style: 50% Lecture, 10% Film/Video, 40% Discussion.
Grading: 30% mid exam, 50% reports/papers, 20% written homework.
Exam Format: essay

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: Powell, Elliott Hunter
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 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: Esparza, Rene
Description: Student may contact the instructor or department for information.

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

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

AmSt 8231 Cultural Fallout: The Cold War and Its Legacy, Readings
  3 credit(s);
Instructor: May, Elaine Tyler
Description: Student may contact the instructor or department for information.

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

AmSt 8920 Topics in American Studies
  3 credit(s), max credits 12, 3 completions allowed;
Instructor: Child, Brenda J
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 3301Credit will not be granted if credit has been received for: ANAT 3611;
Instructor: Cook, Mark S.
Description: Student may contact the instructor or department for information.

ANAT 4900 Directed Studies in Anatomy
  S-N only, 1-6 credit(s), max credits 18, 3 completions allowed;
Instructor: Weinhaus PhD, Anthony James
Description: Student may contact the instructor or department for information.

ANAT 5095 Advanced Problems in Anatomy
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 5150 Human Gross Anatomy
A-F only, 5 credit(s);
Instructor: Weinhaus PhD, Anthony James
Description: Human cadaveric dissection based-on traditional preparation, lab dissection, review sections, radiographic analysis, clinical correlations. Taught by regions. Extremities, torso, head/neck. Assessment by mid-semester/final written & practical examinations. Open to medical students and Graduate/ professional students. The course runs concurrently with InMd 6801. Instructor permission required for registration.

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: Palmer PhD, Melissa L
Description: Student may contact the instructor or department for information.

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: This course examines the interactions between horses and humans in diverse global locations beginning thousands of years ago through to the present. We will examine how those interactions, over time affected daily life,
religion, warfare, trade, transportation and agriculture; how the powerful and changing relationship between Man and horse has influenced Man’s world today. Moreover, the student will gain the appreciation that understanding the past is necessary in order to understand the present and is dependent on context and that context itself changes.  

**Style:** 60% Lecture, 25% Film/Video, 15% Small Group Activities.  
**Grading:** 33% exams, 12% quizzes, 25% homework, 20% final project, 10% discussion  
**Exam Format:** multiple choice, short answer/true and false

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**AnSc 2011 Dairy Cattle Judging**  
2 credit(s);  
**Instructor:** Hansen PhD, 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

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**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.  

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**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.

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**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:** 4 Exams with each exam worth 20% of the grade. Quizzes contribute to 20% of the grade.

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**AnSc 3011 Statistics for Animal Science**  
4 credit(s); Credit will not be granted if credit has been received for: STAT 3011;  
**Instructor:** Raeth-Knight, Mary Louise  
**Description:** The purpose of this course is to introduce students to statistics and statistical techniques and to develop students' statistical reasoning and critical thinking skills. Topics include descriptive statistics, probability, sampling and sampling distributions, hypothesis testing, experimental design, linear correlation, linear regression and multiple linear regression. Students will learn how to make sound arguments and decisions based on statistics when reviewing news articles or scientific publications with statistical content. In addition, in lab sessions, students will learn how to explore and draw conclusions from data using a basic statistical software package.
AnSc 3142 Advanced Livestock Judging
2 credit(s);
Instructor: Rozeboom,Kyle James
Description: Student may contact the instructor or department for information.

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

AnSc 3301 Human and Animal Physiology
3 credit(s);
Instructor: Palmer PhD,Melissa L
Description: Student may contact the instructor or department for information.

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

AnSc 3403 Companion Animal Hot Button Issues
3 credit(s);
Instructor: Stern,Marshall D
Description: There are various circumstances where people differ in their opinions of how companion animals should be treated, type of care they should receive, and what type of animal can or should be kept as companions. There are many hot button issues that are debated among people, in the media, in the courts at both the federal level and in local communities. Students taking this course will become aware and familiar with various issues that affect Companion Animals in our society. Students will debate the pros and cons of each issue and formalize their own opinions based on information presented by debate teams.
Style: 25% Discussion, 50% Small Group Activities, 25% Student Presentation.
Grading: % of overall grade: Oral presentation and contribution in debate - 25%; Written statement on stance taken in the debate- 25%; Weekly one page responses to debates and participation- 50%

AnSc 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: Baidoo PhD,Samuel Kofi
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 3609 Business Planning for Animal Enterprises
2 credit(s);
Instructor: Kollanoor Johny, Anup
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 Research Thesis
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 12, 6 completions 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 12, 6 completions allowed;
Instructor: Cox, Ryan Bradley
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Hansen PhD, Leslie Bennett
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Seykora, Anthony James
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Noll PhD, Sally
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Shurson, Gerald C
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Mauro PhD, Laura J.
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Hathaway, Marcia
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: DiCostanzo, Alfredo
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Rozeboom, Kyle James
AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Palmer PhD, Melissa L
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Raeth-Knight, Mary Louise
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Stern, Marshall D
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Dayton, William R
Description: Student may contact the instructor or department for information.

AnSc 4096 Professional Experience Program: Internship
A-F only, 1-3 credit(s), max credits 6, 4 completions allowed;
Instructor: Kollanoor Johny, Anup
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 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 5200 Statistical Genetics and Genomics
4 credit(s);
Instructor: Da, Yang
Description: This course is the first course of a 2-course series on gene discovery and genomic selection using genome-wide SNP markers. The focus of this course is data analysis for gene discovery based on the relationships between phenotypes and DNA markers. This course has six components: 1) preparation in statistics, genomics concepts and population genetics; 2) parametric linkage analysis; 3) nonparametric linkage analysis including linkage disequilibrium analysis; 4) analysis for mapping quantitative trait loci (QTL); 5) analysis of genome-wide association studies; and 6) parentage testing and concepts of genomic prediction and selection.

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

AnSc 5700 Cell Physiology
A-F only, 4 credit(s);
Instructor: Palmer PhD, Melissa L
Description: Lectures for this course are offered on-line in the form of detailed lecture notes, reading assignments, problem sets, quizzes and screen-capture videos with one class meeting/week to address questions and to discuss the material. In addition, a discussion section meets once a week where students present and discuss a paper and review article from the literature related to the lectures. Topics covered in the course focus on understanding control mechanisms involved in maintaining homeostasis with respect to critical cell functions including regulation of intracellular pH, cell volume, intracellular electrolyte composition, membrane potential and transport processes, molecular motors and intracellular calcium regulation. Grading is based on two in class examinations, problem sets, weekly quizzes, two paper presentations and a final exam.

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 PhD, 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 8311 Animal Bioenergetics
A-F only, 3 credit(s);
Instructor: Baidoo PhD, Samuel Kofi
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: 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 1001 Human Evolution
4 credit(s); Meets CLE req of Biological Sciences
Instructor: Holt, Kirsten Elise
Description: Student may contact the instructor or department for information.

Anth 1003V Understanding Cultures: Honors
A-F only, 4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Shiva, Amirpouyan
Description: Student may contact the instructor or department for information.

Anth 1003W Understanding Cultures
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Kaiser, Sara
Description: Student may contact the instructor or department for information.
Anth 1003W Understanding Cultures
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Shiva, Amirpouyan
Description: Student may contact the instructor or department for information.

Anth 1902 Freshman Seminar: Race and the Making of Humans
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Ho, Karen
Description: Student may contact the instructor or department for information.

Anth 1902 Freshman Seminar: Race and the Making of Humans
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Hayes, Katherine F H
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? 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: Dalinghaus, Ursula Monika
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: Gudeman, Stephen Frederick
Description: Anthropology has been home to famous controversies about human behavior, reason and behavior. We will explore six heated controversies that revolve about topics such as "facts," gender, "truth," poverty and deception. For example, should the famous Margaret Mead have believed Samoan girls when they talked about their sexual lives, can we make moral judgments about other cultures, and what happens when an anthropologist finds a people repulsive? Whose "voices" should be heard when determining the facts? After examining a controversy, we will divide into two sides, debate the issues and then try to reach a judicious perspective. Student participation will play a central role in our explorations into the seamy edges of anthropology, ourselves and other cultures.
Style: 40% Lecture, 50% Discussion. Films
Grading: 55% mid exam, 35% reports/papers, 10% class participation.
Exam Format: Essay

Anth 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 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: Critical Approaches to Global Health  
3 credit(s), max credits 6;  
Instructor: McKay, Ramah  
Description: Student may contact the instructor or department for information.

Anth 4001 Advanced Method and Theory in Archaeology  
3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Monnier, Gilliane F  
Description: Anth 4001 Advanced Method and Theory Fall 2014 topic: Experimental Archaeology Experimental archaeology is one of the most important tools in archaeology for conducting Middle-Range Research, which enables us to propose and test models explaining the dynamic behavioral and natural processes which led to the formation of the archaeological record. It involves the replication of ancient technologies, such as flint-knapping and pottery-making, the study of human subsistence practices such as butchery and farming, and the study of the formation of the archaeological record, including taphonomy and preservation. In this class, we will explore the elements of good experimental design and procedure, and each student will carry out an experimental project of their own design, resulting in a poster or final paper. Class time will often involve group work, as students working on related topics will discuss their research and give each other feedback. This class is designed for advanced undergraduate students who have taken Anth 3001 and at least one upper-level methods-based course (such as lithic analysis, faunal analysis, or ceramic analysis). Graduate students are welcome, and will be given graduate credit. Please contact the instructor with any questions.  
Style: 50% Lecture, 30% Discussion, 10% Small Group Activities, 10% Student Presentation.  
Grading: 60% special projects, 25% written homework, 5% in-class presentation, 10% class participation.

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
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.
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: Monnier,Gilliane F
Description: Student may contact the instructor or department for information.

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

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

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

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

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

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

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

Anth 4013H Senior Honors Thesis Project
A-F only, 3 credit(s);
Instructor: McKay,Ramah
Description: Student may contact the instructor or department for information.
Anth 4025 Studies in Ethnographic Classics
A-F only, 3 credit(s);
Instructor: Song,Hoon
Description: This course explores the forms of understanding and representation that define the project of ethnography. In order to grasp what is at stake in the writing practices that constitute ethnography, the course examines various themes and problems as they have been taken up by writers with different epistemological, disciplinary and aesthetic commitments. Thus, we consider how differently oriented anthropologists as well as historians and novelists, poets and playwrights have approached social phenomena. What kinds of knowledge are conveyed in what forms? What kinds of understanding are permitted by what acts of imagination? What kinds of truths are communicable through what kinds of textual practices? What theoretical assumptions underlie a choice of representational practice? And what are the ethical risks that attend such choices? These are the questions that will guide us.

Anth 4035 Ethnographic Research Methods
3 credit(s);
Instructor: McKay,Ramah
Description: Student may contact the instructor or department for information.

Anth 4047 Anthropology of American Culture
3 credit(s); Meets CLE req of Social Sciences
Instructor: Edminster, Avigdor A N
Description: Student may contact the instructor or department for information.

Anth 4053 Economy, Culture, and Critique
3 credit(s); Credit will not be granted if credit has been received for: ANTH 8205; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Gudeman, Stephen Frederick
Description: Recent, dramatic changes in local and global economies have profoundly affected the lives of millions and have demanded that we rethink our analytical approaches. Drawing on the concept of culture, this course offers a critical perspective on our economic practices and theories. We will analyze and compare economic practices from around the globe, take a fresh look at our own behavior, and reinterpret formal models of economy. Economies and their concepts will be seen as local models which are elaborated and changed by communities. Exploring these models provides a different and new way of understanding material activities and the theories we use to explain them. Using this approach, we will examine critical issues such as the effects that market expansion has on marginalized peoples, on environments, and on our identities in a globalizing world. Rather than emphasizing increased wealth and consumption, many local models provide other meanings of wellbeing and economic success. Students will draw on these ideas to analyze practices in their everyday life. Course readings consist of articles, but the overall view will be presented in class. Class sessions will consist of lectures, discussion of the readings, conversation and reports about everyday experience of economy, and some films. There will be one exam during the semester and one final as well as the brief assignments. The course qualifies for international perspectives.
Style: 50% Lecture, 40% Discussion. Film
Grading: 40% mid exam, 40% final exam, 20% reports/papers.
Exam Format: Essay

Anth 4075 Cultural Histories of Healing
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Langford, Jean M
Description: In this course we examine dynamic interrelationships among healing practices, especially the history and politics of influence, counter-influence, dissemination and conflict. How are healing practices embroiled in colonial and postcolonial encounters? What are the stakes involved in defining a healing practice as belonging to a certain cultural group? What are the connections between medical perception and historically contingent orientations toward language, social life and the body? To explore such questions we draw on ethnographies and histories of modern Euro-American medicine (biomedicine), classical Asian healing practices (Ayurveda and Chinese medicine), and trance-based or "shamanic" healing practices. We consider the legacy of ancient Greek medicine and its divergence from ancient Chinese medicine, the rise of an anatomically based medicine in Europe; the colonial dissemination of biomedicine; the refashioning of local healing practices in postcolonial contexts; the micropolitics of biomedical knowledge (from dominant metaphors of medicine to the social construction of disease categories); the relationship of medicine to marginality and injustice; and the transnational market in indigenous healing. Emphasis will be on class discussions and and two short papers related to the readings and films. The course will concentrate on learning to think creatively and critically about cultural and historical dimensions of medicine. Designed for juniors and above.
Style: 25% Lecture, 65% Discussion. films
Grading: 70% reports/papers, 30% class participation.
Anth 4329 Primate Ecology and Social Behavior
A-F only, 3 credit(s);
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: 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.

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Instructor: Taussig, Karen-Sue
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Instructor: McKay, Ramah
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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
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1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Gudeman, Stephen Frederick
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1-6 credit(s), max credits 6, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: Tappen, Martha
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Instructor: McLean, Stuart J
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Instructor: Song, Hoon
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Anth 4994W Directed Research
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Instructor: Beeman, William O
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Instructor: McNulty, Kieran P
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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 5269 Analysis of Stone Tool Technology
A-F only, 4 credit(s);
Instructor: Tostevin, Gilbert B
Description: An archaeologist once stated "Love is fickle but stone tools are forever." This course takes this principle to heart in order to teach serious undergraduates and beginning graduate students how archaeologists can learn what it means to be human through the study of our ancestors' stone tools. From a scientific point of view, as the vast majority of human existence has been spent using stone tools as the primary medium for the interaction between humans and the environment, understanding the causes of change in stone tool variation through time is fundamental to understanding the human past. The goals of this course include 1) a comprehensive survey of known stone tool making processes (known as flintknapping), 2) a critical examination of different traditions of studying stone tools among archaeologists around the world, and 3) practical experience with analyzing an entire stone tool collection from an experimental archaeological site in order to reconstruct the behaviors, from procurement of raw stone to the discard of the exhausted tools, which produced the site and its collection. This course also provides students with hands-on experience in the practice of making stone tools for analysis. This is a practical laboratory class: the successful completion of this course will allow you to perform the tasks required of archaeologists currently working in the Cultural Resource Management industry. Space is limited to 20 students.
Style: 25% Lecture, 45% Laboratory, & hands-on flintknapping; 5% films
Grading: 45% other evaluation. laboratory reports; 20% final paper; 25% four in-class quizzes; 10% discussion participation
Exam Format: multiple choice and short answer

Anth 5401 The Human Fossil Record
A-F only, 3 credit(s); 1001 or instr consent Credit will not be granted if credit has been received for: ANTH 3401;
Instructor: Tappen, Martha
Description: Fossil evidence paleoanthropologists use to reconstruct human evolutionary history. Taxonomy, phylogeny, behavior, ecology, tool use, land use, biogeography. Hands-on examination of fossil casts, readings from primary/secondary professional sources.
Style: 25% Lecture, 10% Film/Video, 25% Discussion, 15% Small Group Activities, 25% Student Presentation.

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

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

Anth 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 5980 Topics in Anthropology: Storytelling in Conversation
3 credit(s), max credits 6;
Instructor: Sheldon, Amy
Description: This is a hands-on workshop to study the intersection of linguistic, pragmatic, imagistic, and sociolinguistic/interactional features of stories that emerge in everyday spontaneous conversations. Spoken discourse treated as the co-expression of verbal and imagistic embodied meaning. Topics include constructed dialogue, repetition, evaluation, moral stance, discourse markers e.g., 'like', and how the body co-expresses meaning via gesture, gaze, and other body engagement. Format: Instruction in the use of free UMN digital video equipment will be given in Week 1. Each student will record themselves and one or two friends in a spontaneous everyday conversation. No prior video recording or tech experience necessary. Tech support available. Throughout the semester students will apply readings to analysis of their data and instructor-provided data. Development of skills in discourse analysis, data transcription, annotation, analysis, oral presentation, and write-up. Course taught in a tech enhanced STSS classroom. Readings include Labov, Ochs, Schegloff, Jefferson, C. Goodwin, Pomerantz, Thompson, Stievers, Sidnell, Bucholtz, Bamberg, Georgakopoulou, McNeill, Streeck et al. Graduate students can explore a topic of interest. Prerequisite: Introduction to Linguistics, or equivalent, or permission of instructor.

Anth 5980 Topics in Anthropology: Critical Approaches to Global Health
3 credit(s), max credits 6;
Instructor: McKay, Ramah
Description: Student may contact the instructor or department for information.

Anth 8004 Foundations of Anthropological Archaeology
3 credit(s);
Instructor: Hayes, Katherine F H
Description: Student may contact the instructor or department for information.

Anth 8213 Ecological Anthropology
3 credit(s); Credit will not be granted if credit has been received for: ANTH 3041;
Instructor: Wilson, Michael Lawrence
Description: Student may contact the instructor or department for information.

Anth 8510 Topics in Archaeology
3-9 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: History, Memory and Haunting
3-9 credit(s), max credits 9, 3 completions allowed;
Instructor: Langford, Jean M
Description: Student may contact the instructor or department for information.

Anth 8810 Topics in Sociocultural Anthropology: Anthropology of Capitalism
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ho, Karen
Description: Capitalism seems to have triumphed so completely in the past four decades that the question of how to understand, resist, even undermine, ?free markets? and capitalist enterprise is particularly crucial. In this graduate seminar, we will explore some of the diverse strategies that compose an anthropological approach to apprehending capitalism: one that centrally questions the dichotomy of society and culture vs. economy, and one that examines the cosmologies, practices, values, techniques, institutions, flows, and social effects of capitalism. This course is equal parts theory, ethnography, history, and methodology; namely, how multiple approaches and skills are crucial to the analyses of capitalism. We will interrogate key concepts in social scientific approaches to capitalism, from the state to neoliberalism,
from finance to posindustrialism. We offer particular scholarly methodologies, case studies, and histories to study capitalism in such a way as to interrogate its contingent conditions of possibility, its embodied formations, and its disruptions and undoings. While a majority of the readings will focus on dominant capitalism in the United States (precisely because the histories, cultural practices, and ideologies of American capitalism have globalizing influence), we will also pay attention to world-making practices and ideologies from multiple global sites.
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1-18 credit(s), max credits 18, 1 completion allowed;
Instructor: Valentine, David
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Anth 8991 Independent Study
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Instructor: McLean, Stuart J
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Anth 8992 Directed Reading
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Instructor: Wells, Peter S
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Instructor: Raheja, Gloria Goodwin
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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 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, 4 credit(s);  
Instructor: Dunne, Lucy Elizabeth  
Description: Student may contact the instructor or department for information.

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

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

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

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

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

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

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

ADes 4196 Internship in Apparel Design
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted and approved in advance by adviser and internship supervisor, written consent of faculty supervisor, 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: GDES 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
Apparel Studies  240 McNeal Hall

ApSt 5123 Living in a Consumer Society
A-F only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: Materialist consumerism has become one of the defining characteristics of American society. Consumption and the purchase of material possessions are central aspects of who we are, who we dream of being, how we interact with each other, and how we affect the larger environment. The purpose of this course is to provide exposure to a number of selected topics surrounding contemporary consumer society. Students will also have the opportunity to extend their thinking regarding consumer issues/problems to socially responsible business practices. 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 presentations.
Style: 5% Film/Video, 50% Discussion, 30% Small Group Activities, 5% Student Presentation, 10% Web Based.
Grading: 30% mid exam, 30% final exam, 10% reports/papers, 15% in-class presentation, 15% class participation.
Exam Format: Students will take two take-home essay exams assessing understanding and application of material in the course.

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: Johnson PhD, Kim KP
Description: Student may contact the instructor or department for information.

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

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

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

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

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

Applied Business     20 Ruttan Hall

ABus 3051 Career Skills in the Professional Environment
2 credit(s);
Instructor: Bonderson, Lori
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, but will also participate as part of a small group. Visit "Class URL" for ODL policy, fee, and financial aid restrictions. Career planning and job search processes appropriate to business/professional careers. Exploring career options: career centers, company research and networking. Resume and cover letter writing. Job interview preparation. Organizational culture, transition from college to work, and job satisfaction.
Style: Online
Grading: See attached syllabus

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);
ABus 3510 Communicating Virtually Across Global Teams in Applied Business Settings
A-F only, 4 credit(s);
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 policy, fee, and financial aid information. Collaborative exploration of virtual communication within teams and across cultures and the impact of these technologies on global business and societies. Virtual team functioning and dynamics. Influence of cultural perspective on communication within a group. Cross-cultural communication and its impact on our view of "others". Role of communication technology in cultural development. Ethical and legal implications. Contemporary trends and preparation for managing change in communication technology. Becoming an intercultural change agent.

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 though Online and Distance learning, College of the 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 4013 Legal, Ethical, and Risk Issues for Managers
A-F only, 3 credit(s);
Instructor: Mackay, Deborah
Description: This fully online section is offered through Online and Distance learning, College of the Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Key legal, ethical and risk frameworks that apply to business activity and civic life. Through a series of case studies, students will identify areas of legal, ethical and risk exposure within their specific industry. Students will develop best practices to minimize legal liability and manage risks, as well as techniques to navigate ethical challenges in work and personal life. The course includes core material for all students as well as individualized modules specific to each industry area. This course is a core, required course in the Construction Management major. For other students, this course is offered as an elective.

ABus 4022 Management in Organizations
A-F only, 3 credit(s);
Instructor: Haarklau, Evon A
Description: This fully online section is offered through Online and Distance learning, College of the Continuing Education. Visit "Class URL" for ODL 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: Online
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: Online
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.
Grading: 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.

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: Online
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: Online
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.
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: Online  
Grading: See attached syllabus

ABus 4701 Introduction to Marketing  
A-F only, 3 credit(s);  
Instructor: Kaufmann, Geoff Laing  
Description: This is a fully online section offered through Online and Distance Education (ODL), College of Continuing Education. Visit “Class URL” for ODL policies, including fee and financial aid restrictions. The course begins with the 4 Ps of marketing and the marketing concept and takes you through the fascinating worlds of consumer behavior, market research, the marketing mix, strategic marketing, and many others. The course will introduce you to the terminology of marketing and demonstrate how marketing relates to other functional areas within an organization. The course will try to expose you to the breadth, rather than depth in any one particular area, of marketing. A discussion of the international scope of marketing and ethics in business will also be integrated into the course at every stage.

ABus 4993 Directed Study  
1-3 credit(s), max credits 6;  
Instructor: STAFF  
Description: Specially arranged projects, trips, or field work. Primarily for students in the Applied Business certificate program or Bachelor of Applied Science majors. Non-CCE students must have academic adviser approval and meet course prerequisites. See the Course URL for further information on the Directed Study. See http://cce.umn.edu/documents/DCP/BAS-Student-Faculty-Agreement.doc for the Agreement Form.

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, 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: Liu, Donald J.  
Description: Economics is the study of choices made under conditions of scarcity and is divided into two major subject matter areas: micro and macro economics. This course, Principles of Microeconomics, is concerned mainly with the economic decisions of individual consumers and producers and how they interact under various market and regulatory environments. The major emphasis in the course will be on economic concepts and their applications to current economic issues and day-to-day business operations.  
Style: 60% Lecture, 40% Discussion.  
Grading: 25% mid exam, 25% final exam, 15% quizzes, 25% other evaluation. Second midterm; 10% Homework
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 1905 Topics: Freshman Seminar: A Sustainable Global Food System
A-F only, 3 credit(s), max credits 3, 1 completion allowed;
Instructor: Senauer, Benjamin H
Description: Student may contact the instructor or department for information.

ApEc 3001 Applied Microeconomics: Consumers, Producers, and Markets
4 credit(s); [[1101 or ECON 1101 or 1101H or ECON 1101H], [MATH 1142 or MATH 1271]] or instr consent; intended for undergrads in [Ag/Food Bus Mgmt, Appl Econ]; Credit will not be granted if credit has been received for: ECON 3101;
Instructor: Bellemare, Marc
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); [1102 or Econ 1102], [3001 or Econ 3101] or instr consent Credit will not be granted if credit has been received for: ECON 3102;
Instructor: Stinson, Thomas F
Description: This course is concerned mainly with aggregate economic activity. Major emphasis is on factors that determine national income, employment, interest rates, and the price level. These factors include aggregate consumption, business investment, imports and exports, government spending and taxation, the money market, and the labor market. Implications of changes in government economic policies are considered.
Style: 100% Lecture.
Grading: 40% mid exam, 50% final exam, 10% problem solving.
Exam Format: essay

ApEc 3007 Applied Macroeconomics: Policy, Trade, and Development
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Smith, Pamela Jane
Description: This class is divided into two parts. The first part focuses on topics in international financial relations including: international transactions, exchange rate determination, the international currency system, national income determination in an open economy, and economic implications of alternative exchange rate regimes. The second part focuses on topics in international trade relations including: why nations trade, the commodity composition of trade, tariff and nontariff barriers to trade, and international and regional trade agreements (e.g., World Trade Organization). This course is designed for advanced undergraduates with background in both micro and macro economic theory. The course format includes problem-based learning and requires active student participation.
Style: 50% Lecture, 50% Discussion.
Grading: 35% mid exam, 35% final exam, 20% in-class presentation, 10% class participation.
Exam Format: Combination of problems, short answer and multiple choice

ApEc 3061 Economic Development in Contemporary Africa
3 credit(s); 1101 or ECON 1101 Credit will not be granted if credit has been received for: AFRO 3433; 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 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: Student may contact the instructor or department for information.

ApEc 3501 Agribusiness Finance
3 credit(s); [1251 or Acct 2050], 60 cr] or instr consent Credit will not be granted if credit has been received for: FINA 3001;
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.

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.

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: Boland, Michael Aloysius
Description: Student may contact the instructor or department for information.
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.

ApEc 5031 Methods of Economic Data Analysis
3 credit(s);
Instructor: McCullough, Gerard John
Description: A basic course in statistical and econometrics techniques for applied economics. Theory and application of the multivariate regression model using data sets from published economic studies. Emphasis on the use of statistical technique to understand market behavior.
Style: 70% Lecture, 30% Discussion.
Grading: 30% mid exam, 40% final exam, 30% problem solving.
Exam Format: problems

ApEc 5151 Applied Microeconomics: Firm and Household
3 credit(s);
Instructor: Cakir, Metin
Description: Student may contact the instructor or department for information.

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: Boland, Michael Aloysius
Description: Student may contact the instructor or department for information.

ApEc 5711 U.S. Agricultural and Environmental Policy
3 credit(s);
Instructor: Runge, Carlisle Ford
Description: This course provides an overview of global challenges to the survival and sustainability of the environment. The introductory first part of the course introduces the magnitude of these challenges in physical, ecological and human terms. The second part offers a set of economic tools relevant to analysis of these issues: the discount rate, property rights, basic game theory. The third part applies these concepts to a variety of international environmental problems.
Style: 70% Lecture, 30% Discussion.
Grading: 30% final exam, 40% other evaluation. exams, 30% assignments
Exam Format: Multiple choice and essay; take-home essay for final

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

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

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

ApEc 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: Mc Cullough, 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 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 8602 Economics of the Environment
3 credit(s);
Instructor: Coggins, Jay S
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: Pederson, Glenn Darwin
Description: Student may contact the instructor or department for information.

**ApEc 8903 PhD Qualifying Paper Seminar I**
- S-N only, 1 credit(s);
- Instructor: Bellemare, Marc
Description: Student may contact the instructor or department for information.

**ApEc 8991 Advanced Topics in Applied Economics**
- 1-6 credit(s), max credits 6, 1 completion allowed;
- Instructor: Pederson, Glenn Darwin
Description: Student may contact the instructor or department for information.

**ApEc 8991 Advanced Topics in Applied Economics**
- 1-6 credit(s), max credits 6, 1 completion allowed;
- Instructor: Pardey, Philip Gordon
Description: Student may contact the instructor or department for information.

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

**ApEc 8991 Advanced Topics in Applied Economics**
- 1-6 credit(s), max credits 6, 1 completion allowed;
- Instructor: Homans, Frances Reed
Description: Student may contact the instructor or department for information.

**ApEc 8991 Advanced Topics in Applied Economics**
- 1-6 credit(s), max credits 6, 1 completion allowed;
- Instructor: Glewwe, Paul W
Description: Student may contact the instructor or department for information.

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

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

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

ApEc 8991 Advanced Topics in Applied Economics: Topics in Applied Econometrics  
2 credit(s), max credits 6, 1 completion allowed;  
Instructor: Bellemare, Marc  
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 8003 Capstone Course for Plan C MBS Students  
S-N only, 2 credit(s);  
Instructor: Wallace, Robert  
Description: Student may contact the instructor or department for information.

APS 8110 Graduate Seminar Series  
S-N only, 1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Schottel, Janet L  
Description: Student may contact the instructor or department for information.

Arabic  
220 Folwell Hall

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

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

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

Arab 3101 Intermediate Arabic I
5 credit(s); Credit will not be granted if credit has been received for: ARAB 4121;
Instructor: El Helw, Rasha Mohamed
Description: Student may contact the instructor or department for information.

Arab 4101 Beginning Arabic I
3 credit(s); Grad student Credit will not be granted if credit has been received for: ARAB 1101;
Instructor: El Helw, Rasha Mohamed
Description: Student may contact the instructor or department for information.

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

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

Arab 4121 Intermediate Arabic I
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: Arab 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 4121 Intermediate Arabic I
3 credit(s); [4102 or equiv], grad student Credit will not be granted if credit has been received for: ARAB 3101;
Instructor: El Helw, Rasha Mohamed
Description: Student may contact the instructor or department for information.

Arab 5101 Advanced Arabic I
3 credit(s), max credits 4, 1 completion allowed;
Instructor: Vanpee, Katrien
Description: Student may contact the instructor or department for information.
Arch 1281 Design Fundamentals I
A-F only, 4 credit(s); Meets CLE req of Arts/Humanities
Instructor: Hsieh, Lisa L.
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
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
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
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
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
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
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
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
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
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
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, 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
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
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
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
A-F only, 2 credit(s), max credits 18, 9 completions allowed;
Instructor: Reichert, Molly Elizabeth
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: Westre, Aaron Lane
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: Gordon, Michael Alan
Description: Student may contact the instructor or department for information.

Arch 3281 Undergraduate Architecture Studio I
Arch 3351 AutoCAD I
A-F only, 3 credit(s); Arch major or BED major or instr consent Credit will not be granted if credit has been received for: ARCH 5351
Instructor: Anderson,Kristine
Description: Basic concepts, tools, and techniques of computer-aided drawing with current AutoCAD Release. Strategies and techniques for producing dimensioned and annotated drawings suitable for plotting, and an introduction to 3-D drawing capabilities. Use of dimension variables, attributes, blocks, and symbols

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

Arch 3411V Architectural History to 1750
A-F only, 3 credit(s);Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Satkowski,Leon
Description: 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.
Exam Format: Essay, slide ID

Arch 3511 Material Transformations: Technology and Change in the Built Environment
A-F only, 3 credit(s);Meets CLE req of Technology and Society
Instructor: Brownell,Blaine Erickson
Description: This course surveys the development of significant architectural material technologies and their relationships to society and the natural world. The ever-present built environment comprises innumerable choices about material technologies. Architects and other designers of the material world (from furniture designers to infrastructure engineers) make design decisions every day about what, where, how and why to use any particular material. Design decisions about material technologies have enormous implications for the shared human community and the natural environment, with consequences local and global, political and ethical, economic and cultural, and practical and aspirational. The goal of this course is to help students understand the evolving nature of material technologies, how different material applications can change the meaning of architecture, and how materials and material transformations relate to society and the natural environment.
Style: 75% Lecture, 10% Discussion, 15% Student Presentation.
Grading: 30% reports/papers, 30% journal, 30% in-class presentation, 10% class participation.

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
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: Wheeler, James Anthony
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 3711V Honors: 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 3711W; Meets CLE req of Civic Life and Ethics; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Wheeler, James Anthony
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.
CLE req of Civic Life and Ethics; meets CLE req of Social Sciences; meets CLE req of Writing Intensive
Instructor: Wheeler, James Anthony
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
A-F only, 2 credit(s), max credits 24, 6 completions allowed;
Instructor: Anderson, Lee Bruce
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: McQuade, Martha Wilha
Description: Student may contact the instructor or department for information.

Arch 4150 Topics in Architecture
A-F only, 2 credit(s), max credits 24, 6 completions allowed;
Instructor: Terzich, Alex
Description: Student may contact the instructor or department for information.

Arch 4194H Thesis/Capstone Project
A-F only, 3 credit(s), max credits 6;
Instructor: Chen, Arthur Hui-Min
Description: Student may contact the instructor or department for information.

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

Arch 4321 Architecture in Watercolor
A-F only, 3 credit(s); 1301Credit 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 4425 Baroque Architecture
A-F only, 3 credit(s); 3411 or instr consent Credit will not be granted if credit has been received for: ARCH 5425;
Instructor: Satkowski, Leon
Description: Student may contact the instructor or department for information.

Arch 4432 Modern Architecture
A-F only, 3 credit(s); 3412 or instr consent Credit will not be granted if credit has been received for: ARCH 5432;
Instructor: Solomonson, Katherine Mary
Description: Student may contact the instructor or department for information.
Arch 4511 Materials and Methods I
A-F only, 3 credit(s);
Instructor: Handeen, Daniel A
Description: Student may contact the instructor or department for information.

Arch 4571 Architectural Structures I
A-F only, 3 credit(s);
Instructor: Strothman, Susan C

Arch 4671 Historic Preservation
A-F only, 3 credit(s);
Instructor: Donofrio, Gregory
Description: 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 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 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 Topics in Architectural Representation
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Anderson, Lee Bruce
Description: Student may contact the instructor or department for information.

Arch 5350 Topics in Architectural Representation
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Anderson, Lee Bruce
Description: Student may contact the instructor or department for information.

Arch 5350 Topics in Architectural Representation
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Terzich, Alex
Description: Student may contact the instructor or department for information.

Arch 5350 Topics in Architectural Representation
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Johnson, Andrea J
Description: Student may contact the instructor or department for information.
Arch 5350 Topics in Architectural Representation
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Delwiche,Benjamin Lee
Description: Student may contact the instructor or department for information.

Arch 5350 Topics in Architectural Representation
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Saloojee,Ozayr
Description: Student may contact the instructor or department for information.

Arch 5381 Introduction to Computer Aided Architectural Design
A-F only, 3 credit(s);
Instructor: Anderson,Lee Bruce
Description: Student may contact the instructor or department for information.

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

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

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

Arch 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 5561 Tech 1, Structures for Building
A-F only, 2 credit(s);
Instructor: Hopeman,Ryan 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 5563 Tech 3: Advanced Building Technology Integrated Building Systems
A-F only, 0-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Roe,Sharon Louise
Description: Student may contact the instructor or department for information.

Arch 5564 Tech 4: Building Structural Systems
A-F only, 0-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Hopeman,Ryan C
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/donofriog/

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 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 5750 Topics in Urban Design
A-F only, 3 credit(s), max credits 16, 4 completions allowed;
Instructor: Rybak, RT
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: Fisher, Thomas Ray
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: Solomonson, Katherine Mary
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: Johnson, Andrea J
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: Comazzi, John Joseph
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 5993 Directed Study
A-F only, 1-4 credit(s), max credits 8;
Instructor: Brownell, Blaine Erickson
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: Donofrio, Gregory
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: Johnson, Mic
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 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: This introductory class incorporates both digital and analog (black and white darkroom) technologies. We will emphasize a balance of technical skills, exploration of personal vision, and development of critical thinking and vocabulary relating to photography. Your own image making will be considered in the context of photography as a fine art. Class activities will consist of lectures, demonstrations, discussions, visiting artists and field trips. The core of the class work is a series of assignments, as well as in-class exercises. Students? work will be constructively discussed by classmates and instructor in class and small-group critique sessions. Students will learn the fundamentals of digital and film camera operation, composition, moment, light and subject. Students will be introduced to digital hardware and software tools for image adjustment/ manipulation (primarily Adobe Camera Raw and the basics of Photoshop); 35mm SLR film camera loading and handling, film development, and darkroom printing are covered. Work will also be done with cell phone cameras and found images. You are required to provide your own advanced digital camera: one with an interchangeable lens, capable of producing RAW files, and with manual control of shutter speed and f-stop. The Department of Art has 35mm film cameras for the black and white portion of the course. You may, of course, also use your own if you have one.
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 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 1905 Freshman Seminar: Art and Language
A-F only, 3 credit(s);
Instructor: Estep, Jan
Description: This freshman seminar, Art and Language, will mix creative studio assignments with philosophical readings and in-class free writing to explore the relationship between language and visual art. We will look at the ordinary ways we use language (behaviorally in our daily lives and experientially as a means of communication), and investigate it philosophically (for example, how language relates to the world, how the brain/body processes language, and the connection between perception and interpretation). We will also view the work of artists who incorporate text and speech in
their art to get ideas. We will use what we discover in our discussions as a base for further exploration artistically. This course is open to students who are willing to experiment with creative practices; an arts background is welcome but not necessary.

ArtS 1905 Freshman Seminar: Mississippi Flows
A-F only, 3 credit(s);
Instructor: Willow, Diane
Description: As the Mississippi River flows through the university campus it shapes a National Park area in the Twin Cities. What happens along these urban edges of the Mississippi River and how can we reveal the dynamic mix of nature and culture at its riverbanks? Mississippi Flows is an invitation to explore these questions while participating in an interdisciplinary, collaborative process that begins with urban field experiences at the river and expands to include visits with artists, urban planners, cultural historians, geographers, community activists, architects, microbiologists, civil engineers, curators, and storytellers. A series of walks, light rail transit trips, and a possible boat ride present varied perspectives on the Mississippi River. This creative research project introduces techniques for observing, sensing, recording, and sharing the experience of the Mississippi River. Informed by examples of how artists use images, video, audio, interviews, and walking to explore the concept of place, we will create an online mapping of the sights and sounds of the river and propose new ways of portraying how the Mississippi River influences our collective imagination.
Style: 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 15% Field Trips, 25% Studio, 10% Guest Speakers.
Grading: 40% special projects, 10% in-class presentation, 50% class participation.

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); 1101 or 2101, intended or declared art major Credit will not be granted if credit has been received for: ARTS 1102;
Instructor: Zefeldt, Matthew 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: Rose, Thomas Albert
Description: Student may contact the instructor or department for information.

ArtS 2502 Printmaking: Relief, Screen, Digital Processes
A-F only, 4 credit(s); Intended or declared art major or minor Credit will not be granted if credit has been received for: ARTS 1502; Meets CLE req of Arts/Humanities
Instructor: Overturf, Edie
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: Shambroom, Paul Dennis
Description: This introductory class incorporates both digital and analog (black and white darkroom) technologies. We will emphasize a balance of technical skills, exploration of personal vision, and development of critical thinking and vocabulary relating to photography. Your own image making will be considered in the context of photography as a fine art. Class activities will consist of lectures, demonstrations, discussions, visiting artists and field trips. The core of the class work is a series of assignments, as well as in-class exercises. Students’ work will be constructively discussed by classmates and instructor in class and small-group critique sessions. Students will learn the fundamentals of digital and film camera operation, composition, moment, light and subject. Students will be introduced to digital hardware and software tools for image adjustment/manipulation (primarily Adobe Camera Raw and the basics of Photoshop); 35mm SLR film camera loading and handling, film development, and darkroom printing are covered. Work will also be done with cell phone cameras and found images. You are required to provide your own advanced digital camera; one with an interchangeable lens, capable of producing RAW files, and with manual control of shutter speed and f-stop. The Department of Art has 35mm film cameras for the black and white portion of the course. You may, of course, also use your own if you have one.
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: Lane, Thomas J
Description: Student may contact the instructor or department for information.

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

ArtS 3101 Intermediate Drawing
4 credit(s);
Instructor: Austen, Hartmut
Description: Student may contact the instructor or department for information.

ArtS 3102 Intermediate Painting
4 credit(s);
Instructor: Feinberg, David L
Description: This class concentrates on building a personal style and direction in painting. Projects at the beginning of the course encourage diverse experimentation of materials and applications. Students will then adopt and focus on the methods that are the most personal to utilize in series of paintings that form a strong organized portfolio.

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: In this class, we will explore the possibilities of digital technology as an essential tool and component in contemporary drawing practice. The foremost objective of this course is to help you explore the possibilities and approaches in drawing which address this context. This includes drawing: 1. as a means of developing and conceptualizing ideas 2. as studies of forms around us 3. as experimentation with arrangements and the working out of ideas 4. as preparatory studies for other media 5. as an end in itself, where the idea/concept you are addressing is best expressed in this medium. The purpose is to help expand both the content and context of your present individual work and the relationship of our practice as artists to larger historical and cultural concerns. The context for this work is to consider aspects for constructing visual narratives. We will consider the importance of: detailed descriptions (physical/environmental, historical and cultural characteristics). juxtapositions, comparisons and ironies exaggerations and hyperbole praise and lament. For each topic, specific approaches will be given. We will draw from a variety of sources: mythic/historical, experiential (personal and vicarious) and conjectural. Image presentations, correlative readings and discussions will reflect this eclectic orientation. For each component, you will be expected to visually “realize” a drawing. This will involve an expanded definition of drawing utilizing a range of materials and techniques. You will be expected to be able to use the terminology/approaches/concepts introduced in the course for solving the problems presented. The criteria for their use will be their appropriateness to the communication of the component/idea being examined. Our approach will be mixed media, utilizing digital technology to expand upon “handmade” images that are already part of your repertoire. Your output should be appropriate to the image or the idea: from digitally printing onto a variety of surfaces (rag paper, poly films, vinyl, transparent plastics, canvas, fabric), to working with a variety of traditional drawing media to posting your work on the web, etc. Always keep in mind: What happens when you ‘draw’ digital works using the skill and expression of an artist (painters, sculptors, etc.) How can you explore the variations of ‘what if’ that are so easily afforded by digital techniques? Our discussion in critique will focus on developing an “open set” of concerns, examining the means of representation (WHY and HOW DID you do that) as well as the meaning, interpretation and ethics of images (How do we RESPOND?). The emphasis will be on examining substance as well as the production of images. Frameworks for projects will be proposed. These will be concept-based. There will be four assigned class projects and a final. Each project will be reviewed, critiqued and graded. These projects are 60% of your grade.

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
ArtS 3390 Sculpture Methods and Practice: Public Sculpture and Installation Art
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Stanislav, Andrea Christine
Description: This course is an intermediate/advanced exploration of contemporary approaches, concepts and practices of public art. What was, is, and will be public art? What purpose do these art practices serve? Who is the public? What effect and real changes (if any) do these practices have on the public realm and the fine art academy/world? This project-based interdisciplinary course will focus on the development of skill sets in making, designing, critical thinking and realization of: a public art work proposal, a public art intervention project and an installation project. Students will examine the purposes and effects of public art. Historical and contemporary practices, concepts and issues of public art, guerrilla actions, and interventions will be examined. Also, the different contexts in which public art/interventions take place: commissions, long term engagement, and advertisement space among many. Creative development and the evolution of one's personal visual language will be explored through assigned class projects, class presentations, participation in class critiques, field trips, assigned readings, and sketchbook/journal review. You will be responsible for completing three course projects and a research based class presentation. There will be guest speakers in class. The class will also attend outside lectures during the semester. *5000 level students can choose to produce advanced projects either from the syllabus, or can develop self-directed advanced projects -- with consent of instructor. Students are expected to articulate ideas through class dialogue, writing, studio production, and take part in all class critiques.

ArtS 3401W Critical Theories and Their Construction From a Studio Perspective
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
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, ArtS 3401W: 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: Students must register concurrently in a 3XXX or 5XXX Art class with the same instructor. The faculty member will mentor the senior as they prepare work for participation in the Commencement Exhibition during the semester in which they are graduating. The faculty mentor will also help the student to develop a professional artist resume, an artist statement, and learn about the installation and display of work. The dates of the Exhibition in the Public Spaces, West Building of the Regis Center will be announced in a Planning Document which will be sent to your UMN EMAIL ADDRESS after the second week of classes. Student is responsible for: --Noting the Planning Document that will be sent to you at your UMN EMAIL ADDRESS. --Remembering important dates regarding the exhibition and installation. --Responding to important communication about the exhibition and installation that will be sent to you at your UMN EMAIL ADDRESS. --Discussing with your faculty mentor your work to be exhibited. --Filing the Gallery Registration form by its stated deadline. --Installing your own work and allowing adequate time for hanging, touch-ups, and lighting. The Director of Undergraduate Studies and gallery staff will oversee the installation; your faculty mentor may assist. --De-installation of work, all walls patched and touched-up.
ArtS 3490 Workshop in Art
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Henkel, James V
Description: This workshop class is open to intermediate students and will investigate ideas related to the photographers' direct intervention in the image making process. Areas of interest will range from portraiture to studio work to landscape. Still-life, arranged image, directorial mode, constructed image are all terms which describe a genre of photography which has been popular since the very first photographs made by Daguerre in 1839. While some traditions in photography have a decidedly documentary form; this class will approach photography with some of the same concerns found in sculpture, installation, performance or collage. Working in this way the photographer takes on the role of director, producer, builder/organizer of the information that appears in the image. Prerequisites for the course are one beginning level photography class (either digital or darkroom). This class is not a technical class and the student will work in whichever form they are already familiar with (digital or analog), individual and group tutorials will supplement the student's familiarity with the medium. There will be assignments given which introduce the student to a variety of sites? and strategies, the final project will be of your own design based on the themes and ways of working covered in class. The student will supply their own cameras for class.

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: Iacovino, Terez Noelle
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: Overturf, Edie
Description: Student may contact the instructor or department for information.

ArtS 3601 New Media: Making Art Interactive
4 credit(s);
Instructor: Willow, Diane
Description: New Media :: Making Art Interactive introduces new ways of imagining and creating art that transforms the role of viewers into participants. During the Fall 2014 semester we will use the concept of permeable boundaries to begin our explorations with interactive art. This theme will spark a series of playful studio and public art processes as well as a semester-long independent project. Through a series of individual and collaborative explorations, we will experiment with interactive art as a form of experience, a creative process, and a way of conceptualizing artistic ideas. We will learn about tangible media, a hybrid medium that involves digital technologies that connect us with our sensory experience of the physical world. The course is structured to encourage the emergence of a community of learners that benefits from the active exchange of ideas and resources from each participant as well as the extended open source communities of ideas that we access online. New Media :: Making Art Interactive focuses on dynamic art, art that interacts with your sense of time, place, and social space.
Style: 15% Lecture, 20% Discussion, 40% Small Group Activities, 15% Student Presentation, 5% Field Trips, 5% Guest Speakers.
Grading: 40% special projects, 20% in-class presentation, 20% class participation, 20% other evaluation.
Exam Format: critiques

ArtS 3602 Narrative Digital Video
4 credit(s);
Instructor: Lukkas, Lynn Tjernan
Description: In this course, students will build visual storytelling skills and learn the fundamentals of filmmaking. Students will be introduced to color cinematography, aesthetics, sound recording, basic script writing, casting and directing actors, production logistics, and editing. This course is aimed at Art majors, SCMC majors, or student film enthusiasts who would like to further explore digital filmmaking. Students will shoot on HD digital video cameras and edit with Final Cut Pro software on Apple computers. Students will have access to a compact lighting and field sound recording equipment for use on their productions. Alternatively, students are welcome to bring their own laptop with editing software to class. Students
are required to purchase their own portable hard drive to use during the editing process.

**Style:** 10% Lecture, 10% Film/Video, 5% Discussion, 75% Studio.

**Grading:** 50% special projects, 25% attendance, 25% class participation. This is an art course with an emphasis is on producing personal films from a creative and artistic perspective.

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**ArtS 3604 Animation**
- **4 credit(s);**
- **Instructor:** Dege, Jonathan James
- **Description:** Student may contact the instructor or department for information.

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**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

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**ArtS 3703 Photography: Digital Imaging**
- **4 credit(s);**
- **Instructor:** Fullerton, Teri
- **Description:** Student may contact the instructor or department for information.

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**ArtS 3801 Ceramics: Wheel Throwing**
- **4 credit(s), max credits 8;**
- **Instructor:** DeArmond, Stephanie Anne
- **Description:** This course is an intermediate ceramic course. Students are expected to have a basic knowledge of the visual languages and technical aspects of ceramics. Although the course is designed to help develop the technique of ceramic hand-building, the technical aspect is not a main focus of the course. Students should expect to gain a deeper artistic vision and find ways to express this visually, and to develop a creative mind and vision through the ceramic hand-building process. Throughout the semester, students are expected to investigate a variety of ideas, formal designs, and various ways of approaching ceramic glaze surfaces, as well as other combined materials. This course will help students to understand the glazed surface and to use color to enhance the glazing of ceramic objects. While students will develop technical aspects, the objective of the course is to develop a personal voice and critical thinking through assignments, critiques and group discussions. Students are also expected to learn a basic knowledge of kiln firings through class participation in the process. Instruction for this class will be given through: 1. Lecture/Demonstrations of techniques. 2. Slide presentations 3. Individual assistance and instruction 4. Individual and group critiques / discussion and evaluation.

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**ArtS 3802 Ceramics: Handbuilding**
- **4 credit(s), max credits 8;**
- **Instructor:** Yamada, Tetsuya
- **Description:** This course is an intermediate ceramic course. Students are expected to have a basic knowledge of the visual languages and technical aspects of ceramics. Although the course is designed to help develop the technique of ceramic hand-building, the technical aspect is not a main focus of the course. Students should expect to gain a deeper artistic vision and find ways to express this visually, and to develop a creative mind and vision through the ceramic hand-building process. Throughout the semester, students are expected to investigate a variety of ideas, formal designs, and various ways of approaching ceramic glaze surfaces, as well as other combined materials. This course will help students to understand the glazed surface and to use color to enhance the glazing of ceramic objects. While students will develop technical aspects, the objective of the course is to develop a personal voice and critical thinking through assignments, critiques and group discussions. Students are also expected to learn a basic knowledge of kiln firings through class participation in the process. Instruction for this class will be given through: 1. Lecture/Demonstrations of techniques. 2. Slide presentations 3. Individual assistance and instruction 4. Individual and group critiques / discussion and evaluation.

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**ArtS 5107 Advanced Drawing Using Digital Media**
- **4 credit(s);**
- **Instructor:** Katsiaficas, Diane
- **Description:** In this class, we will explore the possibilities of digital technology as an essential tool and component in contemporary drawing practice. The foremost objective of this course is to help you explore the possibilities and approaches in drawing which address this context. This includes drawing: 1. as a means of developing and conceptualizing ideas 2. as studies of forms around us 3. as experimentation with arrangements and the working out of ideas 4. as preparatory studies for other media 5. as an end in itself, where the idea/concept you are addressing is best expressed in this medium. The purpose is to help expand both the content and context of your present individual work and the relationship of our practice as artists to larger historical and cultural concerns. The context for this work is to consider aspects for constructing visual narratives. We will consider the importance of ? detailed descriptions (physical/ environmental, historical and cultural characteristics). ? juxtapositions, comparisons and ironies ? exaggerations and hyperbole ? praise and lament. For each topic, specific approaches will be given. We will draw from a variety of sources: mythic/historical, experiential (personal and vicarious) and conjectural. Image presentations, correlative readings and discussions will reflect this eclectic orientation. For each component, you will be expected to visually "realize" a drawing. This will involve an expanded definition of drawing utilizing a range of materials and techniques. You will be expected to be
able to use the terminology/ approaches/ concepts introduced in the course for solving the problems presented. The criteria for their use will be their appropriateness to the communication of the component/idea being examined. Our approach will be mixed media, utilizing digital technology to expand upon "handmade" images that are already part of your repertoire. Your output should be appropriate to the image or the idea: from digitally printing onto a variety of surfaces (rag paper, poly films, vinyl, transparent plastics, canvas, fabric), to working with a variety of traditional drawing media to posting your work on the web, etc. Always keep in mind: ? What happens when you 'draw' digital works using the skill and expression of an artist (painters, sculptors, etc.) ? ? How can you explore the variations of 'what if?' that are so easily afforded by digital techniques? Our discussion in critique will focus on developing an "open set" of concerns, examining the means of representation (WHY and HOW DID you do that) as well as the meaning, interpretation and ethics of images (How do we RESPOND?). The emphasis will be on examining substance as well as the production of images. Frameworks for projects will be proposed. These will be concept-based. There will be four assigned class projects and a final. Each project will be reviewed, critiqued and graded. These projects are 60% of your grade.

**ArtS 5110 Advanced Drawing**
- 4 credit(s), max credits 16, 4 completions allowed;
- Instructor: Baeumler, Christine Arle
- 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: Ringler, Tamsie
- Description: Student may contact the instructor or department for information.

**ArtS 5390 Advanced Sculpture Methods and Practice: Public Sculpture and Installation Art**
- 4 credit(s), max credits 12, 3 completions allowed;
- Instructor: Stanislav, Andrea Christine
- Description: This course is an intermediate/advanced exploration of contemporary approaches, concepts and practices of public art. What was, is, and will be public art? What purpose do these art practices serve? Who is the public? What effect and real changes (if any) do these practices have on the public realm and the fine art academy/world? This project-based interdisciplinary course will focus on the development of skill sets in making, designing, critical thinking and realization of: a public art work proposal, a public art intervention project and an installation project. Students will examine the purposes and effects of public art. Historical and contemporary practices, concepts and issues of public art, guerrilla actions, and interventions will be examined. Also, the different contexts in which public art/interventions take place: commissions, long term engagement, and advertisement space among many. Creative development and the evolution of one's personal visual language will be explored through assigned class projects, class presentations, participation in class critiques, field trips, assigned readings, and sketchbook/journal review. You will be responsible for completing three course projects and a research based class presentation. There will be guest speakers in class. The class will also attend outside lectures during the semester. *5000 level students can choose to produce advanced projects either from the syllabus, or can develop self-directed advanced projects -- with consent of instructor. Students are expected to articulate ideas through class dialogue, writing, studio production, and take part in all class critiques.

**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 5490 Workshop in Art: Issue: Image and Text**
- 3 credit(s), max credits 12, 12 completions allowed;
- Instructor: Estep, Jan
- Description: In this collaborative workshop we will produce a visual art publication designed by and incorporating work by students in the class. The publication will revolve around a specific editorial theme, chosen by group consensus. Past class issues, for example, have centered on "Land," "Below Ground," and "Erasure" but the topic is wide open. The creative work for the group publication will be made specifically with the editorial theme in mind. Open to intermediate to advanced-level undergrads and grads who work in any media. Students should have an adequate mastery over their chosen medium, to be able to direct their creative process to the editorial theme. Familiarity with digital and photographic media is helpful but not necessary (e.g. ability to document your work, and to use Photoshop and InDesign). We will share skills among the students in the class. Working collectively within a group context is a natural part of the learning environment for this class.
ArtS 5510 Advanced Printmaking
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Overturf, Edie
Description: Student may contact the instructor or department for information.

ArtS 5610 New Media: Making Art Interactive
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Willow, Diane
Description: New Media :: Making Art Interactive introduces new ways of imagining and creating art that transforms the role of viewers into participants. During the Fall 2014 semester we will use the concept of permeable boundaries to begin our explorations with interactive art. This theme will spark a series of playful studio and public art processes as well as a semester-long independent project. Through a series of individual and collaborative explorations, we will experiment with interactive art as a form of experience, a creative process, and a way of conceptualizing artistic ideas. We will learn about tangible media, a hybrid medium that involves digital technologies that connect us with our sensory experience of the physical world. The course is structured to encourage the emergence of a community of learners that benefits from the active exchange of ideas and resources from each participant as well as the extended open source communities of ideas that we access online. New Media :: Making Art Interactive focuses on dynamic art, art that interacts with your sense of time, place, and social space.
Style: 15% Lecture, 20% Discussion, 40% Small Group Activities, 15% Student Presentation, 5% Field Trips, 5% Guest Speakers.
Grading: 40% special projects, 20% in-class presentation, 20% class participation, 20% other evaluation.
Exam Format: critiques

ArtS 5620 Narrative Digital Video
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Lukkas, Lynn Tjernan
Description: Student may contact the instructor or department for information.

ArtS 5640 Advanced Animation
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Dege, Jonathan James
Description: Student may contact the instructor or department for information.

ArtS 5710 Advanced Photography
4 credit(s), max credits 12, 3 completions allowed;
Instructor: Shambroom, Paul Dennis
Description: The core of this course is the development of fully-formed bodies of work in a refined presentation format. The broader goal, however, is for students to embrace their art-making as a way to engage their inner selves and the world at large! All types of photographic (or mixed) media are encouraged. The common objective for each student this semester is to conceive of and complete one brilliant, astounding extended project, and use it to learn (and teach the rest of us) something about yourself and the world. You will write a short artist statement to accompany your final project, with help on working drafts throughout the semester. Technical topics will be covered as needed, demos determined by the class may include advanced lighting, Photoshop techniques, large format camera use, advanced silver printing, social networks, etc. Students will spend the first 10 weeks of the semester producing an extended single project, then a shorter follow-on project incorporating themes and growth from the first project. Students will begin by identifying areas of passion and curiosity that lend themselves to exploration through an extended project. We will start by looking at previous work, then draw from aspects of your artistic, intellectual and emotional lives. This class relies heavily on student interaction in crits, brainstorming sessions and discussions. You will all be helping each other conceive of and guide your projects. There will be at least three work-in-progress crits in addition to the final crit. We will have at least one working artist or curator from the community to help conduct one of the crits. The first major project will be shown in a mid-semester class exhibit. Each student will select a shared reading for the class, prepare questions and lead a discussion. The reading can be fiction or non-fiction, anything that informs your work and sensibilities. These need not be art theory or history, rather readings that are engaged with the non-art world outside school and museums. We will also view and discuss the work of historic and contemporary artists through lectures and field trips.
Style: 10% Lecture, 30% Discussion, 10% Student Presentation, 10% Demonstration, 30% Studio, 10% Guest Speakers.
Grading: 15% class participation, 70% studio- personal projects, 15% presentations and papers

ArtS 5810 Advanced Ceramics
4 credit(s), max credits 16, 4 completions allowed;
Instructor: Lane, Thomas J
Description: Student may contact the instructor or department for information.
ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Lyon, Joyce
Description: Student may contact the instructor or department for information.

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

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

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

ArtS 5990 Independent Study in Art
1-4 credit(s), max credits 12, 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 8300 Practice and Critique: Sculpture
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Rose, Thomas Albert
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: The goals of this graduate-level seminar are three-fold: to become familiar with philosophical arguments concerning art, to show the complexity of art as a phenomenon of investigation, and to develop a way to talk and write critically about this complexity. The course is designed around a few key texts written by philosophers, contemporary critics, and artists, focusing on art made after 1965. Particular attention will be paid to the social, historical, and conceptual contexts in which artists work. The expectation is that you will apply these ideas to your own artistic, creative practice. This is a discussion-oriented course. Most classes revolve around a very close reading of assigned texts, but rather than strict explication emphasis will be placed on how the class as a group responds to the ideas and artworks presented therein. Emphasis is also placed on the practice of writing, both in short weekly to biweekly response papers and in-class free writing. This seminar is required for first-year MFA graduate students in the art department, and any grad wanting to earn an art minor alongside their primary program, but is open to any grad interested in the topic.

ArtS 8490 Workshop in Art: MFA Supporting Paper
1 credit(s), max credits 12, 3 completions allowed;
**ArtS 8490 Workshop in Art: Nash Gallery Curatorial Internship**
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Oransky, Howard Lee
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: Overturf, Edie
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: 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: 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: 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.

ArtS 8990 M.F.A. Creative Thesis
1-9 credit(s), max credits 18, 18 completions allowed;
Instructor: Zefeldt, Mathew James
Description: Student may contact the instructor or department for information.
Art History 338 Heller Hall

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, Jennifer Jane
Description: This course is an introductory survey of artistic practice in the United States: from the colonial period (1600s) to the cold war (1960s). Slide-based lectures introduce students to masterpieces and little-known works of American painting, sculpture, and photography, and explore the many social-historical issues that inform art's role in American life: including, but not limited to, national identity, racial politics, gender relations, religious belief, and pop culture. Grading is based on in-class participation, 3 short research papers (2 pages each), and 2 in-class exams.
Grading: 30% mid exam, 35% final exam, 30% reports/papers, 5% class participation.
Exam Format: Slide ID, short-answer questions (e.g. key term definitions), and slide-based compare/contrast essays.

ArtH 3009 Medieval Art
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: STAFF
Description: Medieval Art This course focuses on Medieval art in Western Europe, from around 1000 to the mid-14th century, a new world of magnificent churches, sculptures of monsters and saints, preciously illustrated books, magnificent gold and stone statues, stained glass windows, and ivory carvings. Works from France, Spain, Germany, Italy, and England will be examined in their historical context, with particular attention paid to cross cultural relations, the development of completely new forms of art, and techniques and the processes of realization.

ArtH 3009 Medieval Art
3 credit(s); Meets CLE req of Arts/Humanities

ArtH 3009 Medieval Art
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Bartoli, Roberta
Description: Medieval Art This course focuses on Medieval art in Western Europe, from around 1000 to the mid-14th century, a new world of magnificent churches, sculptures of monsters and saints, preciously illustrated books, magnificent gold and stone statues, stained glass windows, and ivory carvings. Works from France, Spain, Germany, Italy, and England will be examined in their historical context, with particular attention paid to cross cultural relations, the development of completely new forms of art, and techniques and the processes of realization.

ArtH 3012 19th and 20th Century Art
  3 credit(s);
  Instructor: Weisberg, Gabriel
  Description: Major monuments and issues of modern period: sculpture, architecture, painting, and prints. Movements include 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 3152 Art and Archaeology of Ancient Greece
  3 credit(s); Credit will not be granted if credit has been received for: CNES 3152; Meets CLE req of Historical Perspectives
  Instructor: Canepa, Matthew P.
  Description: This course will provide an introduction to the history of Greek art, architecture and archaeology from the formation of the Greek city states in the ninth century BCE, through the expansion of Greek culture across the Mediterranean and Asia in the Hellenistic period, to the coming of Rome in the first century BCE. While this survey concentrates on the main developments of Greek art, an important sub-theme of this course this is the changes Classical visual culture underwent as it served non-Greek peoples, including the role it played for Alexander and his successors in forging multiethnic, globally minded empires in Western, Central and South Asia. No background in the time period or discipline is expected and therefore this class will also serve as an introduction to interdisciplinary study of art history and the classical world. A number of art historical methodologies will be introduced in order to not only give students a useful background in art history but to give them the tools to think as art historians and incorporate related visual and textual evidence meaningfully into their writing.

ArtH 3335 Baroque Rome: Art and Politics in the Papal Capital
  3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335; Meets CLE req of Historical Perspectives
  Instructor: Ostrow, Steven F
  Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world’s great capitals.

ArtH 3401 Art Now
  A-F only, 3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Civic Life and Ethics
  Instructor: Blocker, Jane M
  Description: This course will analyze visual representations in the fine arts and popular media, in the context of contemporary social issues. Topics covered include obscenity and gender, censorship, art and democracy, technology, art and commerce, the representation of race, the museum, propaganda, and the social role of the artist. A major goal for this course will be to understand the contemporary world through the analysis of dominant cultural values as they are manifested in art. It will be web enhanced but URL not available yet.
  Style: 70% Lecture, 30% Discussion.
  Grading: 60% reports/papers, 20% quizzes, 30% class participation.
  Exam Format: essay

ArtH 3484 The Art of Picasso and the Modern Movement
  4 credit(s);
  Instructor: Weisberg, Gabriel
  Description: Works of Picasso in all media. Blue, Rose, Cubist, Classical, and later periods of Picasso's development against innovations in media; collage, utilization of found-objects, printmaking and ceramics. Autobiographical nature of imagery gives methodological basis for exploring frequently personalized themes. A term paper, based on a close reading of Picasso works in a Minneapolis based collection, and employing a clear methodological emphasis derived from the course, will be stressed. Course Requirements: Mid-term, Final Exam and a Term Paper.

ArtH 3577 Photo Nation: Photography in America
3 credit(s); Meets CLE req of Arts/Humanities  
Instructor: Marshall, Jennifer Jane  
Description: Development of photography in the U.S., from 19th century to present. Topics include: portraits and photo albums in American culture, birth of modern criminal justice system and the cult of celebrity; politics of aesthetics and the defense of photography as a legitimate art form; race and gender in photography; the documentary aesthetic. Major theme: how has American identity been shaped by photographs?

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 3926 The Cinema of Alfred Hitchcock  
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5926; Meets CLE req of Arts/Humanities  
Instructor: Silberman, Robert B  
Description: An exploration of Hitchcock’s major thematic concerns (guilt, romantic obsession, the seductiveness of evil, the double), and technical virtuosity; the cult of horror and the thriller as genre; Hitchcock’s significance as a cultural icon and as a figure in film history and theory. Films will be drawn from both the English and American periods and will include The Lodger, Blackmail, The 39 Steps, Shadow of a Doubt, Strangers on a Train; Psycho and Vertigo.  
Style: 45% Lecture, 40% Film/Video, 15% Discussion.  
Grading: 25% mid exam, 35% final exam, 40% reports/papers. Attendance and homework assignments mandatory, and may affect grade if not satisfactory.

ArtH 3940 Topics in Art History: Graves, Graffiti, & More: Seeing American Folklife  
3 credit(s), max credits 4, 1 completion allowed;  
Instructor: Harle, Peter Glen  
Description: Student may contact the instructor or department for information.

ArtH 3971V Honors: Major Project  
A-F only, 1 credit(s); Honors ArtH major, instr consent Credit will not be granted if credit has been received for: ARTH 3971W; Meets CLE req of Writing Intensive  
Instructor: Wolff, RM  
Description: Student may contact the instructor or department for information.

ArtH 3971W Major Project  
A-F only, 1 credit(s); ArtH major, instr consent Credit will not be granted if credit has been received for: ARTH 3971V; Meets CLE req of Writing Intensive  
Instructor: Wolff, RM  
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
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, 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
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: 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, 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 5188 Art and Archaeology of Early Christianity and the Late Roman Empire
3 credit(s); Credit will not be granted if credit has been received for: RELS 5252;
Instructor: Canepa, Matthew P.
Description: This course will provide graduate students and advanced undergraduates a foundation in the art, architecture and archaeology of the Roman Empire and wider late ancient world from ca. 200 CE to 650 CE. We will begin with the Severans and pay special attention to the crisis of the third century, focusing on the age of the Tetrarchs, the transformation of imperial art and architecture under Constantine the Great and the age of Justinian I. Throughout the course we will analyze the transformation of Old Rome and growth and development of the city of New Rome (Constantinople) from its founding by Constantine the Great, its growth under the Theodosian dynasty and its recreation by Justinian in the sixth century. This course will also examine the emergence of a Christian visual culture within that of Rome and subsequent ‘Christianization’ of Rome throughout all spectra of Roman society from the emperor to slaves, as well as the continued vitality of Classical visual culture. The course will examine the development and cultural contexts of liturgical, architectural and visual environments of the Christian church, and examine the melding of imperial and Christian art, architecture and ritual. Other topics include the development of the early icon, church architecture in Italy and N. Africa and Spain, manuscript painting, and Christian art and architecture in late antique Armenia, Mesopotamia and Asia.

ArtH 5335 Baroque Rome: Art and Politics in the Papal Capital
3 credit(s); Credit will not be granted if credit has been received for: ARTH 3335;
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture—Rome—as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.
ArtH 5484 The Art of Picasso and the Modern Movement
4 credit(s);
Instructor: Weisberg, Gabriel
Description: Student may contact the instructor or department for information.

ArtH 5765 Early Chinese Art
3 credit(s);
Instructor: Kim, Minku
Description: This course surveys the art and material culture of China from the Neolithic (ca. 5000-2000 BCE) to the early imperial period (221 BCE-906 CE), the latter of which spans from the unification of Qin (221-206 BCE) to the collapse of Tang (618-906 CE). With primary reference to archaeological evidence discovered in the recent decades, the course considers (1) cities and palaces, (2) tombs and ritual architecture, (3) trans-and intra-regional contacts, and (4) the rise of new media and technologies during that span of Chinese history. In addition, the second half of the course does distinctively discuss (5) the spread of Buddhist material culture (from the Indian subcontinent and through Central Asia) and its impact to the various Chinese lives. The survey mandates to promote a critical understanding of religious and socio-political context in early China, as manifested at the spectacular articles of its visual culture.
Style: 100% Lecture.
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 30% attendance.
Exam Format: Short essay

ArtH 5926 The Cinema of Alfred Hitchcock
3 credit(s); Credit will not be granted if credit has been received for: ARTH 3926;
Instructor: Silberman, Robert B
Description: An exploration of Hitchcock’s major thematic concerns (guilt, romantic obsession, the seductiveness of evil, the double), and technical virtuosity; the cult of horror and the thriller as genre; Hitchcock’s significance as a cultural icon and as a figure in film history and theory. Films will be drawn from both the English and American periods and will include The Lodger, Blackmail, The 39 Steps, Shadow of a Doubt, Strangers on a Train; Psycho and Vertigo.
Style: 45% Lecture, 40% Film/Video, 15% Discussion.
Grading: 25% mid exam, 35% final exam, 40% reports/papers. Attendance and homework assignments mandatory, and may affect grade if not satisfactory.

ArtH 5950 Topics: Art History: Style and Power: Art of Italian Renaissance Courts
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Bartoli, Roberta
Description: Student may contact the instructor or department for information.

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

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

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

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, 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 8440 Seminar: Contemporary Art: Sound and the Visual
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Blocker, Jane M
Description: Student may contact the instructor or department for information.

Arts and Cultural Leadership  20 Ruttan Hall

ACL 5220 Philanthropy, Development, and Strategic Leadership
A-F only, 3 credit(s);
Instructor: Trow, Tom
Description: Student may contact the instructor or department for information.

ACL 8001 Introduction to Interdisciplinary Inquiry
A-F only, 3 credit(s);
Instructor: Gustafson, DonnaMae J
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
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: Onishi, Yuichiro
Description: This course is an introduction to the field of Asian American Studies (AAS). AAS is a distinct academic discipline that places the experience of Asian immigration and exclusion, then and now, in front and center of intellectual activity. We take this analytical approach because the historical experience of exclusion has visibly shaped existing Asian American communities and identities. Also significant to our approach to the study of the Asian American experience is that myriad stories of ?Asian America,? ultimately, help expand the general understanding of American national life and culture, especially the struggle over what it means to be American. To discover ?Asian America? in other words, is to re-think what ?America? is.
Style: 50% Lecture, 50% Discussion.
Grading: 45% reports/papers, 20% special projects, 15% quizzes, 20% class participation.

AAS 3301 Asian America Through Arts and Culture
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3301; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Lee, Josephine D
Description: Through the analysis of theater, dance, music, visual arts, and other artistic practices, Asian American Through Arts and Culture increases awareness of the artistic contributions as well as the history, politics, and culture of Asian Americans. This semester we will focus on the close analysis and interpretation of individual plays by a range of modern and contemporary artists. Students will analyze, critique, and interpret Asian American drama and theater in light of the historical and social contexts in which they were produced, their creation and uses of aesthetic form, and their impact on individuals and communities. Discussion, writing assignments, and oral presentations will focus on different ways of encountering and evaluating plays; for instance, students will write critical analyses and production reviews. We will examine what it means to define artists and their work as being ?Asian American? and explore how other categories of identity such as gender, sexuality, or class intersect with race. We will study how art works not only as individual creativity but also as communal and social practice; for instance, we look at the history of theaters, such as East-West Players or Pan Asian Repertory Theatre, that have sustained Asian Americans as actors, playwrights, and designers.
Style: 25% Lecture, 5% Film/Video, 50% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.
Grading: 75% reports/papers, 25% attendance.

AAS 3483 Hmong History Across the Globe
3 credit(s);
Instructor: Lee, Mai Na M.
Description: Hmong relations with the Chinese state and mass exodus into Southeast Asia. Hmong history and society in the context of lowland Southeast Asian states and Western colonial powers from 1800 to 1975. The course concludes by critically analyzing the dramatic displacement of Hmong to the West after 1975 and their initial integration into American and other Western societies. Themes include: Hmong and early indigenous Southeast Asian states (pre-1893), French colonial rule (1893-1955), and Hmong entanglement with the US as special guerrilla soldiers in a “Secret War” (1960-75) and becoming refugees across the globe. Religious, social, political, and gender and ethnic identity transformations are central. Grades are based on two midterms, discussions/class assignments, short critical papers, newspaper report, term paper, and a final exam.

AAS 3920 Topics in Asian American Studies: Asian American Health and Research
3 credit(s), max credits 8;
Instructor: Kwon, Melissa
Description: This course provides intensive training in social science research methods within the context of Asian and Pacific Islander (API) women and public health. Students will learn about API women's health issues both locally and nationally. They will then apply this knowledge by actively researching a woman's health topic that most affects the University of Minnesota 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 4231 Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S.
3 credit(s); Credit will not be granted if credit has been received for: AFRO 4231;
Instructor: Brewer, Rose Marie
Description: This course is designed to familiarize students with the history of U.S. public policy development and social relations across racial-ethnic-nation cultures. The focus will be on the United States, but recent developments from the global context will be incorporated for comparative purposes. In this course we will examine the structural and institutional conditions through which people of color have been systematically marginalized, and how diverse populations have fought for and won or lost policy change. The course will help students better understand and interpret the "dominant paradigm" in which public policy has been set. Then, we will examine how and why this paradigm has shifted over time, and what the current prospects are for policy transformation in the domestic and global arenas.
Style: 20% Lecture, 40% Discussion. community research
Grading: 20% final exam, 30% reports/papers, 20% class participation, 30% other evaluation. community research
Exam Format: take-home

Asian Languages and Literatures 220 Folwell Hall

ALL 1905 Freshman Seminar
A-F only, 3 credit(s), max credits 6;
Instructor: STAFF
Description: Why do people sing and dance around in Bollywood films? How is Bollywood masala different from Hollywood cinema? What are the distinct features of Indian cinema? This course provides a historical and critical understanding of these questions. By looking at various cinematic cultures in Bollywood and other Indian film industries, we will study how cinema as an art form and a medium of entertainment has evolved during the last one hundred years. We will also specifically study the characteristics of Bollywood genres like social melodrama, musicals, horror and action. Our discussions will be supplemented with screenings of a number of Bollywood blockbusters and a few lesser-known films.

ALL 3001 Reading Asian Cultures
A-F only, 3 credit(s);
Instructor: Rouzer, Paul F
Description: Introduction to primary Asian texts in translation, with an emphasis on close reading skills and methodological rigor. Interpretative essays and articles by scholars in the field will also be introduced to some extent. Topic for Fall 2014: The Hero in East Asia. How pre-modern cultures in India, China, Korea, and Japan conceptualized the hero, and how the figure of the hero in those cultures have been updated in the wake of modernity. Particular attention will also be paid to gender issues. Texts and films investigated include: The Ramayana; Sima Qian's Records of the Historian; the Ballad of Mulan (and film adaptations); the Hwarang tradition and the Silla-Goguryeo war; the Tale of the Heike and representations of the samurai in literature and film; revenge narratives.
Style: 60% Lecture, 40% Discussion.
Grading: 60% reports/papers, 30% quizzes, 10% class participation.

ALL 3336 Revolution and Modernity in Chinese Literature and Culture
A-F only, 3 credit(s);
Instructor: Allen, Joseph R
Description: This course is an introduction to modern Chinese literature and critical thought from the beginning of the twentieth century to the 1980s. We read the important examples in fiction, essay, and poetry, along with critical readings and historical background. Beginning with reform-minded Confucian scholars around the turn of the century, modern Chinese literature and culture has had an overriding concern with the fate of China itself. As a result, close readings of literature, popular culture, and criticism from the late Qing Dynasty to the Cultural Revolution give us insight into many of the fundamental issues facing the Chinese people through decades of revolution, foreign invasion, civil war, and modernization. During the first half of the century, Chinese literature and culture saw the great achievements of canonical modern writers from Lu Xun to Zhang Ailing. After the founding of the People's Republic of China in 1949, a singular revolutionary culture ensued, in which literature and the arts were put in the service of political consciousness-molding and Cultural Revolution. During this time, an alternative Chinese literary culture developed in Taiwan, resulting in a vibrant and innovative work that featured various strains of modernism. All readings are in English.
ALL 3433W Traditional Japanese Literature in Translation
A-F only, 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, the floating world, beautiful boys, etc. No less importantly, we will also investigate their literary and theoretical continuity, or discontinuity, which we may observe today. Toward this end, we will explore several themes in relation to premodern Japanese literature: aesthetics, philosophy, gender, and so forth. This course also fulfills the Liberal Education requirements of "Literature" and "Writing Intensive." Writing, revising, and class workshops about writing will be an integral part of the class. This course is open to anyone with an interest. No previous knowledge of Japanese studies is required. No reading knowledge of Japanese is required; All of the readings will be available in English. Audio-visual materials will be used whenever available and appropriate.

ALL 3456 Japanese Film
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Posadas, Baryon Tensor
Description: Student may contact the instructor or department for information.

ALL 3457 War and Peace in Japan Through Popular Culture
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: HIST 3476;
Instructor: Mizuno, Hiromi
Description: This history course examines issues related to war and peace in twentieth-century Japan by using animation films and comics. The course is divided into two separate parts. The first looks at how animation was used for war propaganda during WWII in Japan and its then enemy country, the US. The second part explores three key issues that have defined discourse of war and peace in postwar Japan: 1) memory of WWII; 2) the pacifist Constitution; and 3) national security and Self-Defense Force (SDF). We will be reviewing films every two weeks or so. There will be a brief lecture for each film and theme. No prerequisite. This is not a history of anime or manga.
Style: 30% Lecture, 30% Discussion, film viewing
Grading: 55% reports/papers, 25% class participation, 20% other evaluation. Film and comics analysis assignment
Exam Format: essay

ALL 3536 Modern Korean Literature
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Workman, Travis
Description: Student may contact the instructor or department for information.

ALL 3637W Modern South Asian Literature
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course introduces the varied and variegated expanse of South Asian literatures to the students. Starting with a brief introduction to the pre-modern/traditional forms of Indian literatures, the course explores various aspects of modern South Asian literature both in terms of theme and form. The texts are taken from several geographic and linguistic corners of India, Pakistan and Sri Lanka. Originally written in various South Asian languages like Urdu, Bengali, Tamil, Telugu, Marathi, etc., they address specific cultural and social issues of respective regions. The course will teach a large number of writers because of their unique importance within the canons of vernacular South Asian literatures. Their writings will not only familiarize the students with the cultural milieu of South Asia but also with various threads of social, political and historical developments in the region. The literary readings will be accompanied with discussions on important historical phases like the colonial rule and South Asian freedom movements; and socio-political issues such as regional identity, caste and language politics, gender and sexuality, and globalization.

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.
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: Lummus, Wesley W
- Description: Student may contact the instructor or department for information.

ALL 3920 Topics in Asian Culture: Social Change in Modern China
- 3 credit(s), max credits 9, 3 completions allowed;
- Instructor: Wang, 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.
- Style: 60% Lecture, 40% Discussion.
- Grading: 80% reports/papers, 20% class participation.

ALL 3920 Topics in Asian Culture: Cold War Cultures in Korea
- 3 credit(s), max credits 9, 3 completions allowed;
- Instructor: Workman, Travis
- Description:

ALL 3990 Directed Study
- 1-4 credit(s), max credits 16, 4 completions allowed;
- Instructor: STAFF
- Description: Directed Studies in ALL and Asian languages are restricted to very special conditions, with the particulars established by the individual teacher upon department approval. Note: Directed Studies cannot be used to fulfill the core requirements of either the Major or Minor.

ALL 5920 Topics in Asian Culture: Japanese Language and Food
- 3 credit(s), max credits 12, 4 completions allowed;
- Instructor: Szatrowski, Polly Ellen
- Description: Student may contact the instructor or department for information.

ALL 5920 Topics in Asian Culture: Taiwan Film
- 3 credit(s), max credits 12, 4 completions allowed;
- Instructor: McGrath, Jason
- Description: Student may contact the instructor or department for information.

ALL 5920 Topics in Asian Culture: Early Chinese Art
- 3 credit(s), max credits 12, 4 completions allowed;
- Instructor: Kim, Minku
- Description: This course surveys the art and material culture of China from the Neolithic (ca. 5000-2000 BCE) to the early imperial period (221 BCE-906 CE), the latter of which spans from the unification of Qin (221-206 BCE) to the collapse of Tang (618-906 CE). With primary reference to archaeological evidence discovered in the recent decades, the course considers (1) cities and palaces, (2) tombs and ritual architecture, (3) trans-and intra-regional contacts, and (4) the rise of new media and technologies during that span of Chinese history. In addition, the second half of the course does distinctively discuss (5) the spread of Buddhist material culture (from the Indian subcontinent and through Central Asia) and its impact to the various Chinese lives. The survey mandates to promote a critical understanding of religious and socio-political context in early China, as manifested at the spectacular articles of its visual culture.
- Style: 100% Lecture.
- Grading: 20% mid exam, 20% final exam, 30% reports/papers, 30% attendance.
- Exam Format: Short essay

ALL 5990 Directed Study
- 1-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF

Description: Directed Studies in ALL and Asian languages are restricted to very special conditions, with the particulars established by the individual teacher upon department approval. Note: Directed Studies cannot be used to fulfill the core requirements of either the Major or Minor.

ALL 8001 Critical Approaches to Asian Literary and Cultural Studies
3 credit(s);
Instructor: McGrath, Jason
Description: Student may contact the instructor or department for information.

Astronomy 356 Tate Laboratory of Physics

Ast 1001 Exploring the Universe
4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Rudnick, Lawrence
Description: This course is a scientific exploration of the human place in the universe. We study the origin and history of the Universe and the formation of the Earth and the solar system. We compare the Earth’s properties with those of the other planets and explore how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior-high level mathematics. This course has both a lecture AND lab component. This course is intended for non-science majors; no science background is necessary. CSE students should take AST 1011H.
Style: 45% Lecture, 15% Discussion, 40% Laboratory. Discussion time is during lecture.
Grading: 27% mid exam, 25% final exam, 14% special projects, 10% class participation, 24% laboratory evaluation.
Exam Format: Multiple-choice plus short answer.

Ast 1001 Exploring the Universe
4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Humphreys, Roberta M
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 life. Although largely descriptive, the course will occasionally require the use of junior high level math. This course is intended for non-science majors; no science background is necessary. IT students should take Ast 1011H.
Style: 50% Lecture, 10% Discussion, 40% Laboratory.
Grading: 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.
Exam Format: Multiple choice + essay or short answer.

Ast 1001 Exploring the Universe
4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Jones, Terry J
Description: This course is a scientific exploration of the human place in the universe. We study the origin and history of the University and the formation of the Earth and the solar system. We compare the Earth’s properties with those of the other planets and explore how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior-high level mathematics. Lectures are three days a week; on a 4th day each week two hours are spent in small groups working on a lab project. This course is intended for non-science majors; no science background is necessary. CSE students should take AST 1011H.
Style: 50% Lecture, 10% Discussion, 40% Laboratory.
Grading: 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.
Exam Format: Multiple choice, short answer, essay.

Ast 1001 Exploring the Universe
4 credit(s); Credit will not be granted if credit has been received for: AST 1011H; Meets CLE req of Environment; meets CLE req of Physical Sciences
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: Nelson, Thomas John
Description: Student may contact the instructor or department for information.

Ast 1011H Exploring the Universe, Honors
A-F only, 4 credit(s); High school trigonometry, [high school physics or chemistry] Credit will not be granted if credit has been received for: AST 1001; Meets CLE req of Environment; Meets CLE req of Physical Sciences
Instructor: Woodward, Paul R
Description: This is the honors version (more mathematical) of AST 1001, which is our introductory course in Astronomy and Astrophysics. This course is a scientific exploration of the human place in the universe. We study the origin and history of the universe and the formation of the Earth and the solar system. We compare how the study of the heavens has influence human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. Although largely descriptive, the course will occasionally require the use of junior high level math. This course has both a lecture AND lab component. 
Style: 50% Lecture, 40% Laboratory.
Grading: 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.
Exam Format: A possible combination of multiple-choice, short-answer and/or essay questions.

Ast 1905 Freshman Seminar: Cosmic Catastrophes-Things that Go Bump in Night!
OPT No Aud, 2 credit(s);
Instructor: Woodward, Charles E
Description: 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 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: Exoplanets, Habitability & Search for "Alien" Life
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 information 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. 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: 50% Lecture, 10% Discussion, 40% Laboratory.
Grading: 32% mid exam, 30% final exam, 14% special projects, 24% laboratory evaluation.
Exam Format: A possible combination of multiple-choice, essay and/or short answer questions.
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 10;**

**Instructor:** STAFF

**Description:** Independent, directed study in observational and theoretical astrophysics. Arrange with a faculty member.

### Ast 4001 Astrophysics I

**A-F only, 4 credit(s);**

**Instructor:** Davidson, Kris

**Description:** Although it specifically concerns stars, this course covers material that is necessary for anyone who wishes to approach modern astrophysics at a semi-professional level - including extragalactic and cosmological problems. We explore the basic physics of stars, ranging from elementary concepts to phenomena that even the experts cannot yet explain. We also summarize real-life spectroscopy and photometry which show which parts of theory work and which ones don't.

**Style:** 95% Lecture, 5% Discussion.

**Grading:** 16% mid exam, 32% final exam, 45% written homework, 7% class participation.

**Exam Format:** Almost entirely short problems - similar to the homework but shorter. The final may also include one or two ultra-short-essay questions.

### Ast 4101 Computational Methods in the Physical Sciences

**4 credit(s);**

**Instructor:** Jones, Thomas Walter

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

### Ast 4299H Senior Honors Astrophysics Research Seminar

**1 credit(s);**

**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 10;**

**Instructor:** STAFF

**Description:** Independent, directed study in observational and theoretical astrophysics. Arrange with a faculty member.
Ast 4994W Directed Research
3-5 credit(s), max credits 5, 1 completion allowed; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Independent research in observational or theoretical astrophysics. Senior Thesis for undergraduate astrophysics majors. Arrange with faculty member.

Ast 5022 Relativity, Cosmology, and the Universe
4 credit(s); [2001, Phys 2601] or instr consent
Credit will not be granted if credit has been received for: PHYS 5022;
Instructor: Williams, Liliya L R
Description: In this course, we will explore the evolution of the Universe from the beginning to the present day, and will cover the standard theory and observations as well as the latest developments in cosmology. Specific topics include: the global geometry and dynamics, inflation, baryogenesis, big bang nucleosynthesis, cosmic microwave background radiation, gravitational instability and structure formation. The course is intended for graduates and upper-level astronomy and physics undergraduates.
Style: 90% Lecture, 10% Discussion.
Grading: 20% mid exam, 25% final exam, 20% in-class presentation, 10% class participation, 25% problem solving.
Exam Format: Problems, some short answer questions.

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

Ast 8990 Research in Astronomy and Astrophysics
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Thibeault, Terry Lynn
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 to course ends to: explain to their grandparents why their doctor recommends low dose aspirin explain to their parents how their cholesterol medication works evaluate information on a new artificial sweetener understand a new therapy for cystic fibrosis excel in upper level courses Student Expectations: As a student in this course, you are expected to take an active role in your learning. You are expected to attend every class, and to arrive on time and not leave early. You should be prepared for each lecture by reading the assigned material. You should take good lecture notes and use them to make sure you understand all of the concepts covered in class. You should ask questions in lecture to help clarify concepts. You should participate actively in the discussion sessions. You should adhere to the University of Minnesota Student Conduct Code found at http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% additional semester exams.

BioC 2011 Biochemistry for the Agricultural and Health Sciences
3 credit(s); Chem 1015, Bio 1009, credit not granted if received for 3021
Credit will not be granted if credit has been received for: BIOC 3021;
Instructor: Armitage, Ian MacLeod
Description: Purpose: To survey the fundamentals of chemistry and biochemistry as they apply to the organization,
function and regulation of living systems, especially humans. Course Content: This course will review key elements of general chemistry and will introduce you to the disciplines of organic and biochemistry. Lectures in combination with readings in the textbooks will begin with components of general chemistry that are critical for an understanding of biochemistry. This will be followed by a review of organic chemistry principles and structures, again with a focus on material that is most important for an understanding of biochemistry. The last half of the course will be concerned with the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of chemical equilibria, enzyme catalysis, and bioenergetics; fundamental metabolic pathways; and the chemical nature of genetic information storage and transmission. The ultimate objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare you to comprehend the composition of living cells and their physiological processes at the molecular level.

Required Textbook: Fundamentals of General, Organic & Biological Chemistry, 6th Edition, by McMurry/Castellion/Ballantine/Hoeger/Peterson Prentice-Education, Inc. 2007. This textbook is available for purchase at Books Underground, 7 Student Center, St. Paul campus and Coffman Memorial Union Bookstore, Minneapolis campus. Please check with instructor about the use of earlier additions. The text is also available on Amazon.com for a reduced price relative to the bookstore. If you elect this route a new or used copy with or without the MasteringChemistry Access Card can be ordered. At the end of the semester the book can easily be sold back on Amazon.com for little net loss.

Style: 100% Lecture.
Grading: There are 4 exams and each exam is 25% of grade, totaling 100%

BioC 3021 Biochemistry
3 credit(s); [2331 or CHEM 2301, [BIOL 1002 or BIOL 1009 or BIOL 2003]] or instr consent Credit will not be granted if credit has been received for: BIOC 2011;
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
Exam Format: Supervised, in-person (not online) exams

BioC 3021 Biochemistry
3 credit(s); [2331 or CHEM 2301, [BIOL 1002 or BIOL 1009 or BIOL 2003]] or instr consent Credit will not be granted if credit has been received for: BIOC 2011;
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 3021 Biochemistry
3 credit(s); [2331 or CHEM 2301, [BIOL 1002 or BIOL 1009 or BIOL 2003]] or instr consent Credit will not be granted if credit has been received for: BIOC 2011;
Instructor: Schottel, Janet L
Description: This course is a one-semester survey of the fundamentals of biochemistry and is part of the core curriculum required for a Biology major in the College of Biological Sciences. The objective of this course is to provide a foundation for understanding the chemistry of biological systems, i.e., to prepare the student to comprehend the composition of living cells and their physiological processes at the molecular level. Lectures consider the structure and function of proteins, nucleic acids, lipids, and carbohydrates; principles of acid-base equilibria, enzyme catalysis and bioenergetics; fundamental metabolic pathways, and the chemical nature of genetic information storage and expression. The prerequisite reflects the strong emphasis on facility with organic chemistry. This course requires regular study effort on the part of the student. Students who plan to major in biochemistry should enroll in the alternate two-semester series, BioC 4331 and BioC 4332.
Style: 100% Lecture.
Grading: 75% mid exam, 25% final exam.
Exam Format: Short answer, write structures, multiple choice, solve problems, short essays

BioC 3321 Biochemistry
A-F only, 3 credit(s);
Instructor: Terrell, Cassidy R.
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.

BioC 4025 Laboratory in Biochemistry
2 credit(s);
Instructor: Lange, Alex John
Description: Theory and practice of modern biochemical techniques including buffers and pH, protein (lactate dehydrogenase) purification, protein electrophoresis, enzyme characterization using kinetics and immunochemical methods, recombinant DNA techniques.
Style: 40% Lecture, 60% Laboratory.
Grading: 33% mid exam, 34% final exam, 33% quizzes.
Exam Format: 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: Griffin, Timothy Jon
Description: Student may contact the instructor or department for information.

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.
**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

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**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:** The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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**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:** The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guide. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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**BioC 4993 Directed Studies**

S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;

**Instructor:** STAFF

**Description:** The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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**Exam Format:** problem solving
The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involve 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

BioC 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: STAFF
Description: This course is an introduction to the principles of structural biology and the methods used in these studies. It will focus on the theories and methods of experimental techniques used to obtain atomic level conformational data and dynamics of biomacromolecules such as; soluble and membrane-bound proteins, DNA, RNA, and their complexes. Particular emphasis will be placed on how structure and dynamics are correlated with biological function. The class will include a description of current techniques in multidimensional NMR, X-ray crystallography, and mass spectroscopy. A portion of the class time will be used for the analysis of the 3-D molecular graphics demos and discussion of problem sets. The lectures, demos and problems will stress the importance of computer graphics in the study of biomolecular structure. During the semester, participants will be expected to develop a topic involving structure /function relationships in an area of their own interest for oral or paper presentation depending on class size. Grades will be based on this latter special topic presentation/paper and ongoing class participation, plus problem sets, mid term and final exams. The course is designed for advanced undergraduates and beginning graduate students majoring in biochemistry, chemistry, or a related field. The course assumes a basic understanding of biochemistry and physical chemistry, at least one semester of each at the undergraduate level, access to a PC and familiarity with the use of the WEB for bioinformatics.

Style: 70% Lecture, 15% Discussion, 15% Laboratory.
Grading: 35% mid exam, 35% final exam, 30% other evaluation. Problem Sets and Class/Lab Participation
Exam Format: essay, calculations and short answers

BioC 5351 Protein Engineering
A-F only, 3 credit(s);
Instructor: Kazlauskas,Romas J
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: Veglia,Gianluigi
Description: This course is an introduction to the principles of structural biology and the methods used in these studies. It will focus on the theories and methods of experimental techniques used to obtain atomic level conformational data and dynamics of biomacromolecules such as; soluble and membrane-bound proteins, DNA, RNA, and their complexes. Particular emphasis will be placed on how structure and dynamics are correlated with biological function. The class will include a description of current techniques in multidimensional NMR, X-ray crystallography, and mass spectroscopy. A portion of the class time will be used for the analysis of the 3-D molecular graphics demos and discussion of problem sets. The lectures, demos and problems will stress the importance of computer graphics in the study of biomolecular structure. During the semester, participants will be expected to develop a topic involving structure /function relationships in an area of their own interest for oral or paper presentation depending on class size. Grades will be based on this latter special topic presentation/paper and ongoing class participation, plus problem sets, mid term and final exams. The course is designed for advanced undergraduates and beginning graduate students majoring in biochemistry, chemistry, or a related field. The course assumes a basic understanding of biochemistry and physical chemistry, at least one semester of each at the undergraduate level, access to a PC and familiarity with the use of the WEB for bioinformatics.

Style: 70% Lecture, 15% Discussion, 15% Laboratory.
Grading: 35% mid exam, 35% final exam, 30% other evaluation. Problem Sets and Class/Lab Participation
Exam Format: essay, calculations and short answers

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

**Exam Format:** Supervised, in-person (not online) exams

**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 Biochemistry: Structure, Catalysis, and Metabolism**

3 credit(s);

Instructor: Ohlendorf, Douglas Henry

**Description:** BioC 8001 is one of three core classes for first year students of the MCSB umbrella graduate program. The
mission assignment for these courses is summarized in three abbreviated points: 1) Courses will be designed to provide essential background; particularly for those who are not majoring in the area of the course. 2) The Courses will be taught at the level of a first year graduate course (not an upper division undergraduate course). 3) Courses will consist primarily of lectures based on graduate level textbooks (and) will not be primarily literature-based; (Material can be) supplemented with literature sources. Within these guidelines, BioC 8001 was assigned to cover enzyme kinetics, structure, catalysis, metabolism and bioenergetics. The point of reference used to define a graduate level knowledge is the textbook by Voet and Voet, Edition 3. A few lectures on important related topics have been added to enhance understanding of some cutting edge issues in these areas. The first 14 class periods are given by Dr. Nelsestuen and cover biocatalysis and metabolic inter-conversions in biology with considerable discussion of thermodynamics in metabolism. The next 20 class periods are given by Dr. Ohlendorf and focus on structure and interactions of biological macromolecules as well as enzyme kinetics. The last 8 class periods and final exam are by Dr. Nelsestuen and deal with a mixture of topics including bioenergetics of metabolism, metabolic regulation by hormonal action and the effect of cellular crowding and cell structures on specific pathways and regulation events.

BioC 8002 Molecular Biology and Regulation of Biological Processes
   A-F only, 3 credit(s);
   Instructor: Somia,Nikunj V
   Description: Student may contact the instructor or department for information.

BioC 8084 Research and Literature Reports
   S-N only, 1 credit(s), max credits 5, 5 completions allowed;
   Instructor: Armitage,Ian MacLeod
   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: Bthx, Psychiatry & Psychology
   3 credit(s), max credits 8;
   Instructor: Elliott Jr,Bruce Carleton
   Description: Student may contact the instructor or department for information.

BTHX 5100 Introduction to Clinical Ethics
   3 credit(s);
   Instructor: Miles MD,Steven Haverstock
   Description: This course uses real cases to examine the most frequent ethical problems faced by clinicians, patients and families, and ethics consultants. Topics include forgoing life sustaining treatment, decisional capacity, informed consent, treatment refusals, death and dying, pediatric ethics, reproductive issues, research ethics, psychiatric illness and more. This course is intended for students in all fields, practicing clinicians, and members of ethics committees and consulting services.

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: Provides an overview of major theoretical frameworks and foundational issues in bioethics.

BTHX 5400 Intro Ethics in Hlth Policy
   3 credit(s);
   Instructor: DeBruin PhD,Debra Ann
There is a history of policy making in the US for the oversight of controversial science, whether it is basic lab research (e.g., recombinant DNA, human embryonic stem cell research), research involving humans (e.g., gene transfer research) or clinical medicine (e.g., organ donation and transplantation). This course will examine some of that history, and the ethics, law and policy that have been applied in crafting policy in these areas. The goal is to assess what has been learned over the history and how those lessons can be applied in new and evolving areas of controversial science.

**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:** Elliott Jr, Bruce Carleton
- **Description:** Student may contact the instructor or department for information.

**BTHX 5900 Independent Study in Bioethics**
- **1-4 credit(s), max credits 8;**
- **Instructor:** Wolf, Susan M
- **Description:** Student may contact the instructor or department for information.

**BTHX 5900 Independent Study in Bioethics**
- **1-4 credit(s), max credits 8;**
- **Instructor:** DeBruin PhD, Debra Ann
- **Description:** Students propose 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 8000 Advanced Topics in Bioethics: Bioethics, Psychiatry & Psychology**
- **3 credit(s), max credits 8;**
- **Instructor:** Elliott Jr, Bruce Carleton
- **Description:** Student may contact the instructor or department for information.

**BTHX 8000 Advanced Topics in Bioethics: Emerging Sci & Technologies: Law, Ethics & Policy**
- **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: Elliott Jr, Bruce Carleton
- 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: Wolf, Susan M
- 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: Turner, Leigh
- Description: Student may contact the instructor or department for information.

**BTHX 8900 Advanced Independent Study in Bioethics**
- 1-4 credit(s), max credits 8;
- Instructor: Miles MD, Steven Haverstock
- Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

**BTHX 8900 Advanced Independent Study in Bioethics**
- 1-4 credit(s), max credits 8;
- Instructor: 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: Elliott Jr, Bruce Carleton
- 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: Wolf, Susan M
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

**BTHX 8900 Advanced Independent Study in Bioethics**

1-4 credit(s), max credits 8;
Instructor: DeBruin PhD, Debra Ann
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

**BTHX 8900 Advanced Independent Study in Bioethics**

1-4 credit(s), max credits 8;
Instructor: Liaschenko, Joan
Description: Students propose area for advanced individual study with faculty guidance. Students write proposal, which includes outcome objectives and work plan. Faculty member directs student's work and evaluates project.

**BTHX 8900 Advanced Independent Study in Bioethics**

1-4 credit(s), max credits 8;
Instructor: 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: Moe, Annika M
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 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: Phillips, Jane Ann
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. Lecture is interspersed with small group activities, depending on topic.
Grading: 33% mid exam, 25% final exam, 15% reports/papers, 16% quizzes, 4% in-class presentation, 7% problem solving.
Exam Format: Multiple choice exams.

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: Wassenberg, Deena Marie
Description: Biol 1003, THE EVOLUTION AND BIOLOGY OF SEX examines evolution of sexual reproduction, genetics and biology of sex determination, sexual selection, human reproduction, disease transmission, the biology of love, human behavior, overpopulation and resource depletion. In both lecture and laboratory, you will explore what sex can teach us about ourselves by using scientific reasoning, articulation of testable hypotheses, and scientific data analysis. At the end of the course, you will have a better understanding of how sex affects our lives and be prepared to continue to learn about this fascinating topic.
Style: 65% Lecture, 35% Laboratory.
Grading: 33% mid exam, 25% final exam, 15% reports/papers, 16% quizzes, 4% in-class presentation, 7% problem solving.
Exam Format: multiple choice lecture exams

Biol 1009 General Biology
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.
Grading: 34% mid exam, 21% final exam, 10% reports/papers, 25% quizzes, 10% other evaluation. Unannounced lecture quizzes
Exam Format: multiple choice lecture exams

Biol 1009 General Biology
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. Visit ‘Class URL’ for ODL policies, including fee and financial aid information. The course focuses on four fields of biology: cell biology, genetics, evolution, and ecology.
Style: Online
Grading: 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: Price, Michele Boeing
Description: In this course we will explore how the human body functions and develop an understanding of current issues in science. 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 discussions and/or debates on ethics, which considers many interesting topics on how we as
humans impact our society and environment. Debate topics may include: Should we use human stem cells for therapy? 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:** 65% Lecture, 35% Laboratory. Lectures include active learning exercises in small groups, discussions and debates. **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: Pompei, Vanessa
- **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.

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

**Biol 1301 Becoming a Reflective Leader**
- S-N only, 1 credit(s);
- Instructor: Economos, Kristin Ann
- **Description:** Student may contact the instructor or department for information.

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

**Biol 1905 Freshman Seminar for the Biological Sciences: A Possibilist Agenda for the 21st Century & Beyond**
- A-F only, 1 credit(s), max credits 6;
- Instructor: Lehman, Clarence L
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: Photocopying 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: 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: Being Human
A-F only, 1 credit(s), max credits 6;
Instructor: Phillips, Jane Ann
Description: There is nothing more fascinating to humans than humans. From the biology of our bodies to the spirituality of our minds, we spend a lifetime investigating who we are. In this seminar, we will explore a small subset of all that it means to be human, particularly focusing on the intersection of biology, evolution, and ethics. We will explore where we came from to where we are going, how we study ourselves and how we use the information we find to better our health, and how better self-awareness will lead us to decisions we can live with.
Style: 5% Lecture, 80% Discussion, 15% Student Presentation.
Grading: 40% reports/papers, 30% class participation, 30% other evaluation. The "Other Evaluation" is for an in-class presentation (preparation, presentation, evaluation.)

Biol 1905 Freshman Seminar for the Biological Sciences: Genomics: Issues and Applications in Your Life
A-F only, 1 credit(s), max credits 6;
Instructor: Hackett Jr,Perry B
Description: GENOMICS: DNA and genomes are discussed in the many contexts including medical science (diagnosing disease and finding miracle cures), CSI, ethics, the modification of life at every level on the planet, etc. Students will discuss their thoughts on a variety of controversial issues both on-line and in class. In addition to learning about how our understanding of DNA and genomes has infiltrated every aspect of society, students will develop their process of thinking about complex problems by writing short opinions and evaluating those of others in the class.

Biol 1905 Freshman Seminar for the Biological Sciences: Understanding: Evolution-Creationism Controversy
A-F only, 1 credit(s), max credits 6;
Instructor: Moore,Randy
Description: This course has two goals: 1) to help you succeed at the University of Minnesota, and 2) to help you develop your own understanding and appreciation of the evolution-creationism controversy. Succeeding at the University of Minnesota - Each week we'll talk about concerns and/or questions you have about life at the U. Although I can?t fix your parking tickets, I can tell you about what you'll need to do to succeed here. The evolution-creationism controversy ? We?ll discuss the many aspects of this controversy, including its history, legacy, relevance, and key people. We will also discuss a variety of issues related to the controversy, including those involving court decisions, public opinion, and related issues (e.g., racism, politics, etc.). Many people are emotional and opinionated about the evolution-creationism controversy. Although the focus of this course is not on opinions, we will talk about why so many people feel strongly about these issues, and why the controversy persists. You?ll be interested in, and probably surprised by, what you learn.

Biol 1905 Freshman Seminar for the Biological Sciences: 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: It Takes More Than a Good Idea
A-F only, 1 credit(s), max credits 6;
Instructor: Haas,Kelaine Crawford
Description: Automobiles. Pacemakers. iPods. Our world is continually shaped by great ideas. Humans are naturally creative beings, but our brains can constrain innovative thinking through fear, the urge to conform, and the tendency to interpret information in familiar ways. We will explore different perspectives of creativity and innovation through studying familiar examples and iconoclasts like Apple, Disney Pixar, and Henry Ford, who do-or did-things differently to achieve the impossible. As creative thinking is valued more and more in the classroom and in the workforce, understanding and fostering your own personal creativity is more important than ever. We will spend time being creative and inspiring innovation as a class, in small groups and as individuals. These exercises and discussions will give you a jumpstart on overcoming personal and societal barriers to innovation and will stretch your definition and understanding of creativity.

Biol 1905 Freshman Seminar for the Biological Sciences: Stem Cells
A-F only, 1 credit(s), max credits 6;
Instructor: Kawakami,Yasuhiko
Description: Stem cells are one of the rapidly growing topics in biology. Research into stem cells involves a wide range of interests, from basic biology, regeneration, clinical applications, as well as ethics. In this course, we will learn about and discuss the general features of stem cells: what they are, what scientists do with them, what stem cell therapies are available, and how they might be used in the future. We will also learn the difference between embryonic stem cells, which exist only in laboratory cultures, and tissue-specific stem cells, which exist in our bodies. By the end of this seminar, you will have a deeper insight into stem cells.

Biol 1905 Freshman Seminar for the Biological Sciences: Genome
A-F only, 3 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. While it is not yet inexpensive enough for each of us to get the full sequence of all six billion nucleotides of our genome, participants in the class will be expected to order (for about the price of a textbook) their personal genome service from the genomics company 23andme by July 15, 2013. This will provide you, before the start of the semester, with which of hundreds of thousands of known human genetic variations you carry within your genome. 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: Microbiomes
A-F only, 1 credit(s), max credits 6;
Instructor: Bushley,Kathryn E.
Description: The unseen world of microbes is both a fascinating and a dangerous one. Lurking in every square centimeter of soil are thousands to billions of bacteria, protists, viruses, and fungi. The human body itself contains over 10 times more microbial cells than human cells. Generally unseen by the human eye, microbes constitute the largest biomass of any group of organisms on earth and perform such vital functions as producing the earth’s atmospheric nitrogen and decomposing much of the organic matter produced by plants. Advances in genome sequencing technologies are revealing an unprecedented diversity of microbes in the environment and ancient symbiotic relationships between microbes and most other organisms on earth. Human activities that disturb this intricate relationship often lead to disease, ecological disturbance, or the evolution of dangerous pathogens. This course will explore this hidden world of microbes by examining microbiomes, defined as all the microbes, their genetic elements (genomes), and their interactions in a particular environment. We will examine a variety of habitats/hosts ranging from soil to the human gut.

Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: Underwood, Jean M
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based. One-to-one meeting with instructor is required. Time will be spent attending activities and events in addition to online component.
Grading: Points will be earned through the completion of required course activities.

Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: Bolte, Mia M
Description: Student may contact the instructor or department for information.

Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: LeFay MS,Lisa
Description: This course leads you through the steps of career planning and decision making. You will assess your strengths, interests and values. You will learn how to research careers. You will learn about successful strategies for setting goals and making decisions. Not only will you learn about campus resources but you will attend and participate in campus activities.
Style: 100% Web Based.

Biol 2001 Career Planning for Biologists
S-N only, 1 credit(s);
Instructor: 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 recommendedCredit 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 recommendedCredit will not be granted if credit has been received for: BIOL 2002H;Meets CLE req of Biological Sciences

Instructor: Wick,Susan M

Description: Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call ?concept lab?). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions.

Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University?s policy of 3 hours of effort per credit to earn an average grade.  http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%); c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%)

Style: 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities.
Grading: 15% quizzes.

Biol 2002 Foundations of Biology for Biological Sciences Majors, Part I
A-F only, 6 credit(s);[[CHEM 1021 or 1061 or equiv], CBS major] or dept consent ; calculus I or equiv recommendedCredit will not be granted if credit has been received for: BIOL 2002H;Meets CLE req of Biological Sciences

Instructor: Burns,Michael Bradley

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:** 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.

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**Biol 2002H Foundations of Biology for Biological Sciences Majors, Part I**

A-F only, 6 credit(s); [[CHEM 1021 or 1061 or equiv], CBS major, honors student] or dept consent; calculus I or equiv recommended

Credit will not be granted if credit has been received for: BIOL 2002; Meets CLE req of Biological Sciences

**Instructor:** Decker, Mark David

**Description:** Biol 2002 is intended for majors in the College of Biological Sciences. It is the first of two foundational courses that cover core biological concepts, from biomolecules to ecosystems. This course emphasizes evolution, organismal diversity, and genetics within the context of problem solving and application. The lecture/recitation sections are integrated with laboratory exercises to give students basic experience with the methods of modern biology. Student participation is encouraged.

**Style:** 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities. This class is based on a team-based learning model.

**Grading:** 10% Lecture, 10% Discussion, 50% Laboratory, 30% Small Group Activities. 30% Small Group Activities. This class is based on a team-based learning model.

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**Biol 2002H Foundations of Biology for Biological Sciences Majors, Part I**

A-F only, 6 credit(s); [[CHEM 1021 or 1061 or equiv], CBS major, honors student] or dept consent; calculus I or equiv recommended

Credit will not be granted if credit has been received for: BIOL 2002; Meets CLE req of Biological Sciences

**Instructor:** Wick, Susan M

**Description:** Biol 2002 is the first semester of a year-long sequence designed for majors in the College of Biological Sciences. This course emphasizes evolution and genetics, as well as high levels of cognition, including application, analysis, problem solving, and innovation. The lecture/recitation sections are integrated with laboratory exercises to give students experience with many of the paradigms and basic methods of modern biology. Reflecting the nature of modern biological research, teamwork is an integral part of the entire course, including during the lecture/recitation portion (which we call "concept lab"). During concept lab, students work in teams of nine and subteams of two or three to apply their knowledge to problems and projects. The course emphasizes development of skills, including finding and analyzing information, synthesis of new knowledge in projects, and peer evaluation of project presentations and team contributions. Class time: 10% Lecture, 10% Team and Class discussion, 30% Team-based Activities, 50% Laboratory. This class is based on a team-based learning model. Work load: 20-35 pages of reading per week; weekly quizzes; 20-25 pages writing per term; 3 exams; 1-2 projects. This class meets the University’s policy of 3 hours of effort per credit to earn an average grade. http://policy.umn.edu/Policies/Education/Education/STUDENTWORK.html Grade: Grades are based on multiple assessments that enable students to demonstrate their mastery of content and skills in a variety of modes, including: a. Essay-based assessments such as essay exams, take-home exams, weekly reflections, and journals (25%); b. Multiple choice quizzes (15%), c. Team work, including team quizzes, team projects, and team evaluation (25%); and d. Laboratory performance (35%)

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

**Grading:** 15% quizzes.

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**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:** Burns, Michael Bradley

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

**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:** Gibbens PhD, Brian
- **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 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:** Kennedy, Peter Gault
- **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 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:** Kirkpatrick, Catherine
- **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 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:** Wassenberg, Deena Marie
- **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;
- **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;
- **Instructor:** Gibbens PhD, Brian
- **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;
Instructor: Kennedy, Peter Gault
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;
Instructor: Kirkpatrick, Catherine
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 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 2007 Marine Animal Diversity Laboratory
A-F only, 2 credit(s); Introductory biology with lab
Credit will not be granted if credit has been received for: BIOL 2012;
Instructor: Galush, Tiffany Jayne
Description: Student may contact the instructor or department for information.

Biol 2012 General Zoology
4 credit(s); One semester of college biology
Credit will not be granted if credit has been received for: BIOL 2005;
Instructor: 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: May, Georgiana
Description: To introduce principles of plant biology, including the organization, growth and development, reproduction and ecology of plants and related organisms; To gain an understanding of the plant evolution and diversity; To promote an integrated understanding of plant structure and function, and of interactions between plants and associated organisms; To explore the utilization of plants by humans; and To prepare for further study of basic plant biology; of the roles of plants in the environment; of plants as source materials for agriculture, biotechnology, horticulture and forestry.
Style: 50% Lecture, 50% Laboratory.
Grading: 27% mid exam, 27% final exam, 13% quizzes, 33% laboratory evaluation. 5% optional extra credit paper
Exam Format: multiple choice, short essay, short answer
Biol 2301 Leadership and Service
S-N only, 2 credit(s);
Instructor: 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 2331 Anatomy and Physiology I
A-F only, 4 credit(s); Meets CLE req of Biological Sciences
Instructor: Wollschlager, Jenny
Description: Student may contact the instructor or department for information.

Biol 2331 Anatomy and Physiology I
A-F only, 4 credit(s); Meets CLE req of Biological Sciences
Instructor: Haines, David Scott
Description: Student may contact the instructor or department for information.

Biol 2905 Nature of Life, Part III
S-N only, 0.5 credit(s);
Instructor: Wright, Robin
Description: Student may contact the instructor or department for information.

Biol 2960H Exploring Research in the Biological Sciences
A-F only, 1 credit(s);
Instructor: Davis, Dana
Description: Honors students will explore areas of biological research, learn how to access research papers, and prepare an in-depth critical review of a research paper. This course is designed for sophomores

Biol 3001 Nature of Science and Research
S-N only, 1 credit(s);
Instructor: Mosser, Anna
Description: The overall goals of this course are to provide to new transfer students new information and support to engage in scientific research and a community of students with the shared experience of transferring to a new University. Specific goals of this course include learning about the research enterprise, becoming familiar with University resources (e.g., libraries, University research facilities, administrative support facilities, others) that support research, learning how to read research papers, exploring the ethics of research, and preparing for your research experience, from finding a mentor to having your safety training, lab skills in order.
Style: 10% Lecture, 85% Discussion, 5% Field Trips. The field trips are visits to campus laboratories.
Grading: 90% reports/papers, 10% special projects.

Biol 3004 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 3004H;
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 3004H 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 3004;
Instructor: Kirkpatrick, Catherine
Description: Biol 2004H is intended for majors in the College of Biological Sciences. It accompanies Biol 2003H. This
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 3211 Physiology of Humans and Other Animals
3 credit(s);
Instructor: Price, Michele Boeing
Description: This course is a comparative study of fundamental physiological mechanisms. It covers a broad range of organisms studied from the standpoint of evolution of functional systems, the mechanisms and morphological variations that exist to deal with functional problems posed by the environment. We will also explore disease conditions that result from abnormal function of one or several of the basic control systems of the body. Emphasis will be placed on nervous, endocrine, muscular, cardiovascular, immune, respiratory, renal, digestive, and reproductive physiology. Where appropriate, basic chemical and physical laws will be reviewed in order to enhance and to promote student understanding.

Biol 3227 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

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: Nedveck, Derek
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

Biol 3302 Leadership For Change
S-N only, 1 credit(s);
Instructor: Thu1, 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.

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.

Biol 3341 Microbiology
A-F only, 2 credit(s);
Instructor: Terrell, Cassidy R.
Description: Student may contact the instructor or department for information.

Biol 3342 Microbiology and Environmental Issues
A-F only, 1 credit(s);
Instructor: Terrell, Cassidy R.
Description: Student may contact the instructor or department for information.

Biol 3345 Microbiology Lab
A-F only, 1 credit(s);
Instructor: Terrell, Cassidy R.
Description: Student may contact the instructor or department for information.

Biol 3407 Ecology
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 3409 Evolution
3 credit(s); One semester college biology
Credit will not be granted if credit has been received for: BIOL 5409;
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 3411 Introduction to Animal Behavior
3 credit(s); One semester college biology
Credit will not be granted if credit has been received for: BIOL 3811;
Instructor: Bee, Mark Allen
Description: This course introduces the biological study of behavior. Although students from all disciplines are welcome, it is one of three core courses for undergraduate majors in EEB. About half of the course is taught in lecture form, and half in the laboratory. The course covers mechanisms in behavior, including behavior genetics, hormonal and neural mechanisms. The course emphasizes an evolutionary approach to behavior, outlining ideas about feeding, social and reproductive behavior, mating systems, altruism, communication and other contemporary issues in behavioral biology. Laboratory exercises stress experimental approaches to hypothesis testing and involve work with real animals. Students will spend several weeks at the end of the semester conducting an independent project.
Style: 40% Lecture, 60% Laboratory.
Grading: 20% mid exam, 20% final exam, 13% special projects, 13% class participation, 34% laboratory evaluation.
Exam Format: Multiple choice, short answer and short essay.

Biol 3503 Biology of Aging
A-F only, 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: Novack, Lisa Marie
Description: Student may contact the instructor or department for information.
Biol 3960H Communicating in the Biological Sciences
A-F only, 1 credit(s);
Instructor: Decker, Mark David
Description: Student may contact the instructor or department for information.

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. 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 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, 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
Exam Format: Supervised, in-person (not online) exams

Biol 4004 Cell Biology
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: Clarke, Duncan John
Description: Processes fundamental to cells. Emphasizes eukaryotic cells. Assembly/function of membranes/organelles.
Cell division, cell cycle control, apoptosis, cell form/movement, intercellular communication, transport, secretion pathways.
Cancer cells, differentiated cells.
Style: 80% Lecture, 20% Discussion.
Grading: 60% mid exam, 20% final exam, 20% quizzes.

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 4342 Neuroscience
A-F only, 3 credit(s);
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

Biol 4590 Coral Reef Ecology
A-F only, 2 credit(s);
Instructor: Cotner, Sehoya H
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: The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.
Biol 4794W Directed Research
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed; Meets CLE req of Writing Intensive
Instructor: Wick, Susan M
Description: The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. ? Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. ? Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. ? Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. ? Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. ? Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. ? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. ? Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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: Wick, Susan M
Description: The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. ? Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. ? Often students complete a literature review as part of a directed studies project. ? Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. ? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. ? Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. ? Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. ? Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. ? Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. ? Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. ? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. ? Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

Biol 4994 Directed Research
S-N only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Wick, Susan M
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. ? Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. ? Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. ? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. ? Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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 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: Nedveck, Derek
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 student Credit will not be granted if credit has been received for: BIOL 3409; 
Instructor: Zink, Robert Martin
Description: This course presents an overview of the biology of evolutionary change. After a brief review of the history of thought in evolutionary biology, genetic mechanisms of evolution change are presented, including mutation and recombination, natural selection and genetic drift. Population genetics and molecular evolution are explored in depth. Examples of macroevolution are presented including adaptation by natural selection, sexual selection, speciation, species concepts and extinction. Human health is used to illustrate the adaptive ability of microorganisms, and we also touch on the evolution of aging.

Biol 5409 Evolution
3 credit(s); One semester of college biology, grad student Credit will not be granted if credit has been received for: BIOL 3409; 
Instructor: Curtsinger, James W
Description: This course presents an overview of the biology of evolutionary change. After a brief review of the history of thought in evolutionary biology, genetic mechanisms of evolution change are presented, including mutation and recombination, natural selection and genetic drift. Population genetics and molecular evolution are explored in depth. Examples of macroevolution are presented including adaptation by natural selection, sexual selection, speciation, species concepts and extinction. Human health is used to illustrate the adaptive ability of microorganisms, and we also touch on the evolution of aging.

Biol 6793 Directed Studies
1-7 credit(s), max credits 7, 7 completions allowed; 
Instructor: Schottel, Janet L
Description: Student may contact the instructor or department for information.
Biol 6794 Directed Research
S-N only, 1-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Schottel, Janet L
Description: Student may contact the instructor or department for information.

Biol 6999 Capstone Project
S-N only, 2 credit(s);
Instructor: Schottel, Janet L
Description: Student may contact the instructor or department for information.

Biology, Society, and Environment

BSE 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 be 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 at the University and the varied educational opportunities.
Style: 100% Lecture.
Grading: 100% reflection paper.

BSE 3361W Geography and Public Policy
A-F only, 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: The class focuses on the way in which the United States government produces material culture — goods, services, and the necessary artifacts supporting such production — directly through its own agency and indirectly by influencing the behavior of other governments, corporations, and individuals, against a backdrop of the incessant and often acrimonious debate concerning the role and responsibility of the federal government. The course will pay particular attention to the way in which individuals in the legislative, administrative, and judicial branches of the government reach consensus and compromise about production and so create incentives and dis-incentives for certain types of behavior. Target audience, undergraduates in any major.
Style: 60% Lecture, 40% Laboratory.
Grading: 100% reports/papers.

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: McCullough, Brannon R.
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: Ogle, Brenda Marie
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 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); BME Upper Div or dept consent
Credit will not be granted if credit has been received for: BMEN 3201;
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 3601 Biomedical Engineering Careers and Practice in the Med Tech Industry
A-F only, 1 credit(s);
Instructor: Kroll, Mark William
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: Rissmann, William John
Description: Student may contact the instructor or department for information.

BMEn 4011 CAD/CAE of Bioelectrical Devices
A-F only, 1 credit(s);
Instructor: Yucesan, Birin
Description: Student may contact the instructor or department for information.

BMEn 4013 CAD of Biomechanical/transport Devices
A-F only, 1 credit(s);
Instructor: Hattan, Paul
Description: Student may contact the instructor or department for information.

BMEn 4015 CAE of Biomechanical/transport Devices
A-F only, 1 credit(s);
Instructor: Guler, Ismail
Description: Student may contact the instructor or department for information.

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: Wang, Chun
Description: 1) An overview of the types of modern biomaterials and their applications 2) Understand biomaterial selection, design, and structure-function relationships 3) Understand the concept and evaluation of biocompatibility 4) Develop analytical and critical-thinking skills for the evaluation of research literature
Grading: 20% mid exam, 30% final exam, 20% reports/papers, 20% written homework, 10% class participation.

BMEn 5041 Tissue Engineering
3 credit(s);
Instructor: Shen, Wei
Description: Quantitative cell and tissue biology; characterization of tissues; engineering fundamentals; along with a discussion of engineered tissues presently in development or clinical use.
Grading: 25% mid exam, 30% final exam, 15% reports/papers, 15% written homework, 5% class participation, 10% problem solving.

BMEn 5321 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 5351 Cell Engineering
3 credit(s);
Instructor: Odde, David John
Description: Many of the innovations that are occurring in medicine are based on advances in our understanding of fundamental cellular and molecular processes. "Cell Engineering" is the attempt to understand cellular and molecular processes in a quantitative and physically fundamental way, so that ultimately the behavior of cells can be controlled. The subject is sufficiently new that there is not an accepted textbook in the area. Therefore, I have chosen four topics for study this term. Many other areas were also considered, however in one semester it would not be possible to have much depth in any one area if many topics were included. The course will not cover electrophysiology, as it is covered in other university courses. Instead the focus will be on processes that are principally chemical and mechanical in nature. Neither will the course cover basic cell biology. The main approach will be to review original research papers from the literature to understand the motivation for the work, the approaches taken, the results gained, and their significance. The main goal of the course is to develop the ability to analyze cellular processes using a quantitative, physically based approach. In particular, students will be taught how to develop mathematical and computational models for cellular processes based on the fundamental physics and chemistry of the relevant molecular components.
Grading: 25% special projects, 50% quizzes, 20% written homework, 5% class participation.

BMEn 5411 Neural Engineering
3 credit(s);
Instructor: Netoff, Tay Ivan
Description: This course explores the fundamental theoretical basis for neural engineering in the context of past, present, and future applications. The course begins with an introduction to neuroanatomy and neurophysiology assuming students taking the course have little experience in neuroscience. Homework problems will be predominantly building models of neurons and measuring their response to stimulation. The theoretical topics will be taught to develop a deeper understanding and practical knowledge of neural engineering applications. The applications to be studied are arranged by technological maturity. Classical neural engineering subjects include electrode design, neural modeling, cochlear implants, and deep brain stimulation. Developing applications include prosthetic limbs, micturition control, and prosthetic vision. Future applications will cover brain machine interface, seizure prediction, optical imaging of the nervous system and place
cell recordings in hippocampus. Students will also explore other advanced topics in their own 20 minute presentations at the end of the course.

**Style:** 70% Lecture, 20% Student Presentation, 10% Guest Speakers.

**Grading:** 20% mid exam, 20% final exam, 20% written homework, 30% in-class presentation, 10% class participation.

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

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**BMEn 5501 Biology for Biomedical Engineers**

- **3 credit(s);**
- **Instructor:** Ogle, Brenda Marie
- **Description:** Student may contact the instructor or department for information.

**BMEn 5701 Cancer Bioengineering**

- **A-F only, 3 credit(s);**
- **Instructor:** Provenzano, Paolo
- **Description:** Student may contact the instructor or department for information.

**BMEn 5910 Special Topics in Biomedical Engineering**

- **3 credit(s), max credits 6;**
- **Instructor:** Wood, David K
- **Description:** Student may contact the instructor or department for information.

**BMEn 5920 Special Topics in Biomedical Engineering**

- **3 credit(s), max credits 6;**
- **Instructor:** Barocas, Victor Howard
- **Description:** Student may contact the instructor or department for information.

**BMEn 8101 Biomedical Digital Signal Processing**

- **A-F only, 3 credit(s);**
- **Instructor:** Lim, Hubert Hyungil
- **Description:** Student may contact the instructor or department for information.

**BMEn 8401 New Product Design and Business Development**

- **A-F only, 4 credit(s); [CSE grad student or CSOM grad student], some design experience; 8401, 8402 must be taken same yr Credit will not be granted if credit has been received for: ME 8221;**
- **Instructor:** Durfee, William K
- **Description:** See the course web site for a complete description.

**BMEn 8401 New Product Design and Business Development**

- **A-F only, 4 credit(s); [CSE grad student or CSOM grad student], some design experience; 8401, 8402 must be taken same yr Credit will not be granted if credit has been received for: ME 8221;**
- **Instructor:** Forbes, Daniel P
- **Description:** See the course web site for a complete description.

**BMEn 8501 Dynamical Systems in Biology**

- **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 8511 Systems and Synthetic Biology
A-F only, 3 credit(s);
Instructor: Sarkar, Casim
Description: Student may contact the instructor or department for information.

BMEn 8511 Systems and Synthetic Biology
A-F only, 3 credit(s);
Instructor: Sarkar, Casim
Description: Student may contact the instructor or department for information.

BMEn 8601 Biomedical Engineering Seminar
S-N only, 1 credit(s);
Instructor: Sarkar, Casim
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
A-F only, 3 credit(s), max credits 8;
Instructor: Sarkar, Casim
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
Description: Student may contact the instructor or department for information.

BICB 8510 Computation and Biology
A-F only, 2 credit(s), max credits 4;
Instructor: Neuhauser, Claudia
Description: Student may contact the instructor or department for information.

BICB 8920 BICB Colloquium
S-N only, 1 credit(s), max credits 2;  
Instructor: Neuhauser, Claudia  
Description: Student may contact the instructor or department for information.

**BICB 8930 BICB Journal Club**  
S-N only, 1 credit(s), max credits 4, 4 completions allowed;  
Instructor: Van Riper, Susan Kaye  
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 2001 Mechanics and Structural Design  
A-F only, 4 credit(s);  
Instructor: Chaplin, Jonathan  
Description: Fundamental treatment of statics, dynamics, and principles of structural design. Techniques for individual components, including trusses, beams, and columns. Using conventional lumber products, engineered wood products, and steel. Lab.

### BBE 2001 Mechanics and Structural Design  
A-F only, 4 credit(s);  
Instructor: Chaplin, Jonathan  
Description: Student may contact the instructor or department for information.

### BBE 2002 Introduction to Engineering Design  
A-F only, 3 credit(s);  
Instructor: Nieber, John Little  
Description: Student may contact the instructor or department for information.

### BBE 2002 Introduction to Engineering Design  
A-F only, 3 credit(s);  
Instructor: Nieber, John Little  
Description: Student may contact the instructor or department for information.

### BBE 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:** 100% Web Based. 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**
- **3 credit(s);**
- **Instructor:** Clanton, Chuck
- **Description:** Student may contact the instructor or department for information.

**BBE 3093 Directed Studies**
- **1-5 credit(s), max credits 5, 1 completion allowed;**
- **Instructor:** STAFF
- **Description:** Independent study of topic(s) involving physical principles as applied to agricultural production and land resources. Contact the department for information.

**BBE 3101 Introductory Statics and Structures for Construction Management**
- **A-F only, 3 credit(s);**
- **Instructor:** STAFF
- **Description:** Statics, engineering wood design principles, mechanical properties of wood. Design techniques for individual components. Trusses, beams, columns. Using conventional lumber products, engineered wood products, and steel. Simple structures explored through examples, assignments.

**BBE 3201 Sustainability of Food Systems: A Life Cycle Perspective**
- **A-F only, 3 credit(s); Meets CLE req of Global Perspectives**
- **Instructor:** Hill, Jason David
- **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 (Polyactic 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 4301 Applied Surface and Colloid Science**
3 credit(s); 3043 or BMEN 2101 or CHEN 3101 or CHEM 4501 or instr consent Credit will not be granted if credit has been received for: BBE 5301;  
Instructor: Severtson, Steve John  
Description: Basic principles of unit operations and their applications to bio-based products manufacturing - chemical

**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 cellulose 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.

BBE 4407 Bioproducts: Manufacturing and Applications
3 credit(s); 1002 or instr consent Credit will not be granted if credit has been received for: BBE 5407;  
Instructor: Espinoza, Omar A  
Description: Student may contact the instructor or department for information.

BBE 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

BBE 4491 Senior Topics: Independent Study
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: STAFF  
Description: Independent study in an area of interest to an undergraduate majoring in one of the fields within the College of Food, Agricultural and Natural Resource Sciences.

BBE 4535 Assessment and Diagnosis of Impaired Waters
A-F only, 3 credit(s); Upper division CSE or CFANS or CBS student or instr consent Credit will not be granted if credit has been received for: BBE 5535;  
Instructor: Magner, Joe A  
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 4608 Environmental and Industrial Microbiology
A-F only, 3 credit(s); [BIOL 1001 or BIOL 1009], CHEM 1011 Credit will not be granted if credit has been received for: BBE 5608;  
Instructor: Schilling, Jonathan Scott
Bioremediation is the use of organisms, often microbes or their enzymes, to detoxify contaminants either in the field (in situ) or in containment facilities (ex situ). This is a rapidly-growing field that also has a long tradition. This Bioremediation course aims to introduce the fundamentals, survey the discipline, and discuss contemporary applications. In the course, we will 1) define 'contaminants', sources and environmental fates, 2) characterize biological organisms, pathways and catalysts utilized in bioremediation, and 3) discuss site inspection practices, bioremediation technologies and application in real-world situations. Teaching will combine lectures with hands-on experiences. Students will also be assigned out-of-class projects (with worksheets) that will be either solo or in groups, and a short presentation will be required along with a short writing assignment.

**Style:** 60% Lecture, 20% Discussion. class projects

**Grading:** 45% mid exam, 15% final exam, 10% class participation, 30% problem solving.

**Exam Format:** multiple choice, short and long answer, diagnostics

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**BBE 4744 Engineering Principles for Biological Scientists**

A-F only, 4 credit(s);[Math 1142 or Math 1271], Phys 1101; intended for non engineering studentsCredit 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.

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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 studentsCredit will not be granted if credit has been received for: FSCN 4331;

Instructor: ABBAS, Abdennour

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

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**BBE 4801H Honors Research**

A-F only, 2 credit(s);

Instructor: STAFF

Description: First semester of independent research project supervised by faculty member.

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**BBE 4802H Honors Research**

A-F only, 2 credit(s);

Instructor: STAFF

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

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**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.

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**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

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**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.

**BBE 5023 Process Control and Instrumentation**

3 credit(s); Grad student or instr consent

**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.
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:** 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 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 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 A
- **Description:** This course was designed to prepare students to work in the water quality industry in the USA. The goal is to provide students with the background policy, models and field methods needed to prepare a TMDL. Students will learn about varying models and spend two Saturdays in the field discussing/collating data.
- **Style:** 40% Lecture, 20% Student Presentation, 20% Field Trips, 20% Guest Speakers.
- **Grading:** 30% final exam, 35% special projects, 25% written homework, 10% attendance.

**BBE 5608 Environmental and Industrial Microbiolog**
- A-F only, 3 credit(s);
- [BIOL 1001 or BIOL 1009], CHEM 1011
- Credit will not be granted if credit has been received for: BBE 4608;
- **Instructor:** Schilling, Jonathan Scott
- **Description:** Bioremediation is the use of organisms, often microbes or their enzymes, to detoxify contaminants either in
the field (in situ) or in containment facilities (ex situ). This is a rapidly-growing field that also has a long tradition. This Bioremediation course aims to introduce the fundamentals, survey the discipline, and discuss contemporary applications. In the course, we will 1) define 'contaminants', sources and environmental fates, 2) characterize biological organisms, pathways and catalysts utilized in bioremediation, and 3) discuss site inspection practices, bioremediation technologies and application in real-world situations. Teaching will combine lectures with hands-on experiences. Students will also be assigned out-of-class projects (with worksheets) that will be either solo or in groups, and a short presentation will be required along with a short writing assignment.

**Style:** 60% Lecture, 20% Discussion. class projects

**Grading:** 45% mid exam, 15% final exam, 10% class participation, 30% problem solving.

**Exam Format:** multiple choice, short and long answer, diagnostics

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**BBE 8001 Seminar I**
- A-F only, 1 credit(s);
- Instructor: Sarkanen, Simo
- **Description:** Student may contact the instructor or department for information.

**BBE 8300 Research Problems**
- 1-10 credit(s), max credits 10, 10 completions allowed;
- Instructor: STAFF
- **Description:** Student may contact the instructor or department for information.

**BBE 8703 Managing Water in Food and Biological Systems**
- 3 credit(s);
- Instructor: Ruan PhD, R. Roger
- **Description:** Student may contact the instructor or department for information.

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**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: Caruso, Gerald M
- **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: Nelson, Rick
- **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: Ruskin,Lorna Marie
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: Schieve,Brett Edwin
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: Schieve,Brett Edwin
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: Petzold, Andy M
Description: Student may contact the instructor or department for information.

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

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

CLI 2711 Career Exploration I
S-N only, 1 credit(s);
Instructor: Grossell, 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 3393 Directed Study
1-3 credit(s), max credits 6;
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

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

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

CLI 3393 Directed Study
1-3 credit(s), max credits 6;
Instructor: Punti, Gemma
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: Metzger, Kelsey Jean
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: Muthyala, Rajeev S.
Description: Student may contact the instructor or department for information.

CLI 3496 Internship: Professional Experience
S-N only, 1-6 credit(s), max credits 12;
Instructor: Taniguchi, Yuko
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: 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 - 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: Living on Purpose
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Hegland, Jennifer Jean
Description: Student may contact the instructor or department for information.

CLI 3711 Career Preparation: The a??healthy immigrant effecta??
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Punti, Gemma
Description: Student may contact the instructor or department for information.
CLI 3711 Career Preparation: Orientation for Learning Away
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Schieve, Brett Edwin
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: Dunbar, Robert Lee
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 4393 Capstone Directed Study
S-N only, 1-3 credit(s), max credits 6;
Instructor: Nichols, Marcia Dawn
Description: Student may contact the instructor or department for information.

CLI 4496 Capstone Internship
S-N only, 1-12 credit(s), max credits 36, 3 completions allowed;
Instructor: Taniguchi, Yuko
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: Taniguchi, Yuko
Description: Student may contact the instructor or department for information.

CLI 4711 Capstone Reflections I
S-N only, 1 credit(s);
Instructor: Wright-Peterson PhD, Virginia M
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: Wright-Peterson PhD, Virginia M
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 4713 Capstone Reflections I and II
S-N only, 2 credit(s);
Instructor: Dunbar, Robert Lee
Description: Student may contact the instructor or department for information.

CLI 4713 Capstone Reflections I and II
S-N only, 2 credit(s);
Instructor: Henderson Vazquez, Teresa A
Description: Student may contact the instructor or department for information.

CLI 4896 Capstone Certificate in Health Professions
6-15 credit(s), max credits 30;
Instructor: Hegland, Jennifer Jean
Description: Student may contact the instructor or department for information.

Center for Spirituality and Healing  Mayo Code 505; C592 Mayo

CSpH 1001 Principles of Holistic Health and Healing
2 credit(s);
Instructor: Brady, Linda J
Description: This course focuses on how individuals and society can work for a balanced life to achieve optimal health with our stressful lifestyles. Topics include: 1. what is health and well being? 2. cultural constructs of health and well being; 3. fundamental principles and proven measures of holistic health that promote health and well being; 4. practical application and integration of holistic health practices into daily personal life. 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. All students will complete an assignment each week to reflect on the topic.
Style: 100% Web Based.
Grading: 80% written homework, 20% other evaluation. Students will read or watch a video and reflect on the significance of the material. "Other evaluation" means that students will post comments on readings and videos to class discussion and respond to other students.
Exam Format: No exams

CSpH 3001 Introduction to Integrative Healing
3 credit(s);
Instructor: Brady, Linda J
Description: This course provides an overview of the current US health care system and US cultural views of health and wellness. Within this context, it then provides students with an overview of various complementary and alternative medical systems and practices that might be integrated into the current way of thinking about health and wellness and treatment of illness/disease. Examples include: whole systems of thinking about health such as traditional Chinese medicine or Native American healing, manual therapies like chiropractic, energy therapies like reiki and qigong, mind body therapies like yoga and meditation, biologically based therapies like botanicals and aromatherapy.
Style: 100% Web Based.
Grading: 75% written homework, 25% other evaluation. Homework is 20 points each of 12 of the 15 weeks, posted reflections and responses are 7 points each of these 12 weeks. Two weeks will have no assignment and there is no final

CSpH 3101 Creating Ecosystems of Well-Being
2 credit(s);
Instructor: Hathaway, Kate M
Description: This course focuses on information, practices, and tools that enable individuals and communities to build capacity for wellbeing. Students will examine factors and ecosystems that contribute to health happiness and wellbeing, develop a personal plan for health and wellbeing, and participate in a group project to design an ecosystemic plan to create the highest possible wellbeing for a community.

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
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 stress response.
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; 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. Grade is based on 12 assignments and 12 reflection and response postings to class forum

**Exam Format:** no exams

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**CSpH 4311 Foundations of Hatha Yoga: Alignment & Movement Principles**
- 3 credit(s);
- Instructor: Schuver,Katie Jo
- **Description:** Student may contact the instructor or department for information.

**CSpH 5000 Explorations in Integrative Therapies and Healing Practices: Wellbeing & Resilience for Health Professionals**
- 1 credit(s), max credits 12, 4 completions allowed;
- Instructor: Hathaway,Kate M
- **Description:** Student may contact the instructor or department for information.

**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.

**CSpH 5000 Explorations in Integrative Therapies and Healing Practices: Mindfulness in the Workplace: Essential Skills**
- 2 credit(s), max credits 12, 4 completions allowed;
- Instructor: Wilcox,Cindy J
- **Description:** Student may contact the instructor or department for information.

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

**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: Bailey MSW,LICSW,Tanya K
- **Description:** Student may contact the instructor or department for information.

**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.

**CSpH 5102 Art of Healing: Self as Healer**
- 1 credit(s);
- Instructor: Halcon PhD,Linda Luciente
- **Description:** Student may contact the instructor or department for information.
CSpH 5102 Art of Healing: Self as Healer
1 credit(s);
Instructor: Culliton, Patricia D
Description: The initiation of a healer in ancient cultures was a rigorous process that included a personal journey of inner development and transformation that paralleled the learning of the cognitive and physical healing techniques. This course will introduce the health science student to the concept of the individual transformational journey. The science of psychoneuroimmunology (PNI) and mind-body-spirit approaches will be explored through a variety of methods including lecture, scientific literature review, meditation, imagery, journal writing and social support through group interaction. The students will have an opportunity to explore various aspects of self-knowledge, self-awareness, transpersonal (nonlocal) experiences and the paradoxical mysteries that will prepare them for their student and personal lives.

CSpH 5111 Ways of Thinking about Health
S-N only, 2 credit(s);
Instructor: Hassel, Craig Alan
Description: CSPH 5111 "Ways of Thinking About Health" offers students a rare opportunity to explore diverse cultural contexts through field-trip immersion experiences. In this course, we will explore fundamental aspects of several different health-care systems, including Indigenous North American Medicine, Vedic Medicine, Traditional Chinese Medicine and biomedicine. The field-trip learning serves as a micro-cultural immersion experience for the purpose of helping students to understand different worldviews and systems of knowledge that do not correspond to a scientific model. The course is based upon the idea that thinking about different worldviews and healing systems from a detached, survey perspective is a quite different matter than thinking critically within the system being explored to attain deeper learning. Each field trip experience will be followed by a writing assignment, where the student will write on a health care issue of their choice, but from within the perspective of the system being studied. This approach is designed to allow each student the maximum opportunity to explore, experience, appreciate and articulate the cultural diversity in ways of thinking about health.
Style: 20% Lecture, 30% Discussion, 50% Field Trips.
Grading: 70% reflection paper, 30% in-class presentation.

CSpH 5215 Forgiveness and Healing: A Journey Toward Wholeness
3 credit(s);
Instructor: Umbreit, Mark S
Description: This course will examine the impact of forgiveness on the process of inter-personal and intra-personal healing, as well as healing of conflict and trauma at the intergroup level. Forgiveness and healing will be examined in the context of intense interpersonal and intrapersonal conflicts in multiple health care and social work settings, including in families, between physicians and nurses, between patients/clients and nurses/social workers, within communities, among friends, between co-workers, or within ourselves. This course is designed to provide a basic understanding of the central elements of forgiveness and healing in the context of multiple health care and social work settings. The concepts of forgiveness and healing will be examined from multiple spiritual and secular traditions. The underlying philosophical elements of forgiveness and healing will be critically assessed and beliefs and rituals from numerous indigenous and European traditions will be presented and examined. The focus will be upon gaining a more grounded understanding of the process of forgiveness and its potential impact upon emotional and relational healing. The concepts of forgiveness and healing will be addressed in a very broad and inclusive manner, with no assumptions made related to their specific cultural context or meaning. Empirical studies that have examined the impact of forgiveness upon emotional and physical healing will be reviewed.

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 PhD, Miriam Elaine
Description: Student may contact the instructor or department for information.

CSpH 5341 Overview of Indigenous Hawaiian Healing
2 credit(s);
Instructor: Kreitzer, Mary Jo
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. Fall semester section is taught in-person. Spring semester section is completely online.
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

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**CSpH 5431 Functional Nutrition: An Expanded View of Nutrition, Chronic Disease, and Optimal Health**
- **2 credit(s);**
- **Instructor:** Litchy, Andrew Paul
- **Description:** Student may contact the instructor or department for information.

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

**CSpH 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 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 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 6000 Integrative Therapies and Healing Practices Topics: Secondary Data Analysis for CIH Research**  
3 credit(s), max credits 16, 4 completions allowed;  
**Instructor:** Johnson PhD, Pamela Jo  
**Description:** Student may contact the instructor or department for information.

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**Chemical Engineering**  
**151 Amundson Hall**

**ChEn 1001 Advances in Chemical Engineering and Materials Science**  
S-N only, 1 credit(s), max credits 2, 1 completion allowed; Recommended for [chemical engineering, materials science/engineering] majors; Credit will not be granted if credit has been received for: MATS 1001;  
**Instructor:** Hu, Wei-Shou  
**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 Credit will not be granted if credit has been received for: MATS 3041;
Instructor: Francis, Lorraine F
Description: Student may contact the instructor or department for information.

ChEn 3045 Chemical Engineering Industrial Internship
A-F only, 1 credit(s), max credits 2;
Instructor: Francis, Lorraine F
Description: Student may contact the instructor or department for information.

ChEn 3101 Chemical Engineering Thermodynamics
A-F only, 4 credit(s);
Instructor: Morse, David Clark
Description: Student may contact the instructor or department for information.

ChEn 3701 Introduction to Biomolecular Engineering
A-F only, 3 credit(s);
Instructor: Hackel, Benjamin J.
Description: Student may contact the instructor or department for information.

ChEn 4041 Industrial Assignment II
A-F only, 2 credit(s); 3041, 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: McCormick, Alon Victor
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: Derby, Jeffrey Jay
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: Derby, Jeffrey Jay
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: Cussler Jr, Edward L
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 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 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
ChEn 8221 Synthetic Polymer Chemistry
A-F only, 4 credit(s); Undergrad organic chemistry course, undergrad physical chemistry course or instr consent
Credit will not be granted if credit has been received for: CHEM 4221;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

ChEn 8301 Physical Rate Processes I: Transport
A-F only, 3 credit(s);
Instructor: Zasadzinski, Joseph Anthony
Description: Student may contact the instructor or department for information.

ChEn 8401 Physical and Chemical Thermodynamics
A-F only, 3 credit(s);
Instructor: Aydil, Eray S
Description: Fundamentals of classical thermodynamics with emphasis on solving problems encountered in chemical engineering and materials science. The course is an organized exposition of fundamental concepts and traditional tools that will help chemical engineers and materials scientists understand and analyze the systems they are likely to encounter while conducting original research.
Style: 100% Lecture.
Grading: 40% mid exam, 20% final exam, 40% written homework.
Exam Format: Problem solving with open class notes provided by the instructor and open student notes.

ChEn 8501 Chemical Rate Processes: Analysis of Chemical Reactors
A-F only, 3 credit(s);
Instructor: Bhan, Aditya
Description: Student may contact the instructor or department for information.

ChEn 8555 Chemical Engineering Teaching Practicum
S-N only, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 8900 Seminar
S-N only, 1 credit(s);
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 8993 Directed Study
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

ChEn 8994 Directed Research
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Kaznessis, Yiannis
Description: Student may contact the instructor or department for information.

Chemical Physics 139 Smith Hall

ChPh 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
**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:** Salmon, Debra J
- **Description:** Student may contact the instructor or department for information.

**Chem 1061 Chemical Principles I**
- **3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061 Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences**
- **Instructor:** Driessen, Michelle
- **Description:** Student may contact the instructor or department for information.

**Chem 1061 Chemical Principles I**
- **3 credit(s); Grade of at least C- in [1011 or 1015] or [passing placement exam, Concurrent registration is required (or allowed) in 1065]; intended for science or engineering majors; Concurrent registration is required (or allowed) in 1065; registration for 1065 must precede registration for 1061 Credit will not be granted if credit has been received for: CHEM 1071H; Meets CLE req of Physical Sciences**
- **Instructor:** Pelton, Emily 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: Leopold, Doreen Geller
Description: Student may contact the instructor or department for information.

Chem 1062 Chemical Principles II
3 credit(s); Grade of at least C- in 1061 or equiv, Concurrent registration is required (or allowed) in 1066; registration for 1066 must precede registration for 1062; Credit will not be granted if credit has been received for: CHEM 1072H; Meets CLE req of Physical Sciences
Instructor: 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
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, 3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Distefano, Mark Dewey  
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 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: BIOC 2331
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: Perkins, Angela
Description: Student may contact the instructor or department for information.

**Chem 2311 Organic Lab**
4 credit(s); Grade of at least C- in [2302, 2304] or [Concurrent registration is required (or allowed) in 2302, Concurrent registration is required (or allowed) in 2304]; Credit will not be granted if credit has been received for: CHEM 2312H
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 (&quot;Pavia&quot;) 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); [2301 or Concurrent registration is required (or allowed) in 2301], [Chem or ChemE or BioC] major, instr consent; Credit will not be granted if credit has been received for: CHEM 2311
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**
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: Hoye, Thomas R.
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);
Instructor: Tschirner, Ulrike Waltrau
Description: The first half of this course is focused on fundamentals such as the chemical composition of plant materials and typical reactions. The topics covered include: Carbohydrate Chemistry, Cellulose, Hemicellulose, Lignin, distribution of chemical components in plant material, Extractives and Oils, Starch, Proteins including Enzymes, Alkaloids. The second part of this class is focused on chemical reactions involved in conversion of biomass to industrial products; it includes the new emerging field of biomass conversion to Bioenergy and Bioproducts and traditional processes such as production of rayon or papermaking fiber. Examples of chemical reactions involved in biorefining include: conversion of cellulose and hemicellulose to ethanol, furfural, PLA (Polylactic acid); conversion of oil to biodiesel; gasification of biomass followed by Fisher Tropsch conversion to fuels.
Style: 70% Lecture, 30% Discussion.
Grading: 100% other evaluation. Based on 6 quizzes, 6 homeworks, final exam

Chem 4011 Mechanisms of Chemical Reactions
3 credit(s);
Instructor: STAFF
Description: "Mechanisms of Chemical Reactions" is intended to prepare you to (1) elucidate the mechanisms of chemical reactions based on kinetic and thermodynamic principles and collected data, and (2) be able to evaluate mechanistic arguments made in the literature. The course is meant to be broadly applicable to many types of chemistry - organic, physical, materials, computational, etc.- and will focus on basic principles of reactions rather than specific kinds of molecules.
Style: 100% Lecture.
Grading: 67% mid exam, 33% problem solving.

Chem 4094V Directed Research
1-5 credit(s), max credits 75, 15 completions allowed; Meets CLE req of Writing Intensive
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 4094W Directed Research
1-5 credit(s), max credits 75, 15 completions allowed; Meets CLE req of Writing Intensive
Instructor: Stathopoulos, Stephanie M
Description: Student may contact the instructor or department for information.

Chem 4101 Modern Instrumental Methods of Chemical Analysis
A-F only, 3 credit(s);
Instructor: STAFF
Description: Basic electronic, optical, computer technologies employed in design of chemical instrumentation. Advanced topics in spectroscopy (e.g., FT-nmr, FT-IR, atomic absorption/emission). Electrochemistry. Mass spectrometry.
Style: 100% Lecture.
Grading: 30% mid exam, 30% final exam, 7% special projects, 15% quizzes, 15% problem solving, 3% other evaluation.

extra materials

Chem 4201 Materials Chemistry
3 credit(s); [[4502 or equiv], 4701] or instr consent Credit will not be granted if credit has been received for: CHEM 8201;
Instructor: STAFF
Description: Crystal systems/unit cells, phase diagrams, defects/interfaces, optical/dielectric properties, electrical/thermal conductivity, X-ray diffraction, thin film analysis, electronic structure, polarons/phonons, solid state chemistry, liquid/molecular crystals, polymers, magnetic/optical materials, porous materials, ceramics, piezoelectric materials, biomedical materials, catalysts.
Style: 100% Lecture.
Grading: 31% mid exam, 38% final exam, 15% quizzes, 16% problem solving.

Chem 4221 Introduction to Polymer Chemistry
3 credit(s); [2302, 4501] or instr consent Credit will not be granted if credit has been received for: MATS 5221;
Instructor: Reineke PhD, Theresa Marie
Description: Student may contact the instructor or department for information.

Chem 4311W Advanced Organic Chemistry Lab
4 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Reactions, techniques and instrumental methods used in modern synthetic organic chemistry.
Style: 10% Lecture, 90% Laboratory.
Grading: 100% laboratory evaluation.

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: Cramer, Christopher J
Description: Student may contact the instructor or department for information.

Chem 4502 Introduction to Quantum Mechanics and Spectroscopy
A-F only, 3 credit(s);
Instructor: Gagliardi, Laura
Description: Student may contact the instructor or department for information.

Chem 4511W Advanced Physical Chemistry Lab
3 credit(s); Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Experiments illustrating principles and methods of thermodynamics, reaction kinetics, and quantum mechanics.
Style: 20% Lecture, 80% Laboratory.
Grading: 100% laboratory evaluation.

Chem 4701 Inorganic Chemistry
3 credit(s);
Instructor: STAFF
Description: Introduction to inorganic chemistry at an advanced level. Periodic trends. Structure and bonding concepts in compounds where s and p electrons are important. Descriptive chemistry of solids and transition metal compounds. Emphasis on transition metal chemistry. Advanced topics in main group and materials chemistry.
Style: 100% Lecture.
Grading: 60% mid exam, 25% final exam, 15% quizzes.

Chem 4711W Advanced Inorganic Chemistry Lab
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Mann, Kent R
Description: Student may contact the instructor or department for information.

Chem 4715 Physical Inorganic Chemistry
3 credit(s);
Instructor: Stein, Andreas
Description: Student may contact the instructor or department for information.

Chem 4721 Special Topics in Chemistry: Excited-State Phenomenon in Organic Molecules
A-F only, 1-4 credit(s), max credits 8;
Instructor: Muthyala, Rajeev S.
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 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 8081 M.S. Plan B Project I
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Thao, Nancy
Description: Student may contact the instructor or department for information.

Chem 8082 M.S. Plan B Project II
A-F only, 1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Thao, Nancy
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: Douglas, Christopher J.
Description: Student may contact the instructor or department for information.

Chem 8361 Interpretation of Organic Spectra
4 credit(s);
Instructor: Que Jr, Lawrence
Description: Student may contact the instructor or department for information.

Chem 8411 Introduction to Chemical Biology
4 credit(s);
Instructor: Pomerantz, William Charles Krause
Description: Student may contact the instructor or department for information.

Chem 8413 Nucleic Acids
4 credit(s);
Instructor: Tretyakova, Natalia Yurievna
Description: Student may contact the instructor or department for information.

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 8715 Physical Inorganic Chemistry
Chicano Studies  19 Scott Hall

Chic 1102 Latinos in the United States: Culture and Citizenship
3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: STAFF
Description: Historical and cultural study of the complex and multilayered relationship that Latinos have with the U.S., their country of origin, as well as the social, cultural, and political dynamics that influence Latino identity, politics, and sense of belonging in the U.S. Focuses on the concept of cultural citizenship.

Chic 1102H Latinos in the United States: Culture and Citizenship
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: Padron, Karla M
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: It might be argued that everyone in today?s world struggles to understand and articulate often multiple identities. While people in US society are encouraged to think of themselves as individuals, none of us are finite entities. We are all the products of history, and we exist in complex relationships to others. This has tremendous implications in terms of our relationship to power. How have various definitions of citizenship over time and space depended on markers of race and ethnicity? What role do Latinas/os play in twenty first century politics? How has Latina/o creativity influenced U.S. culture? For people outside mainstream norms, identities must be formed without adequate representation in popular culture. This means that we must look past common media representations and into history, home cultures, languages, ethnic literature and film, etc. in order to understand, express and/or construct an affirmative vision of what it means to be Chicana/o or Latina/o in ?post-racial? America. It also means that we must learn to question common, yet incorrect, narratives about who we are.
Style: 20% Lecture, 15% Film/Video, 50% Discussion, 15% Student Presentation.

Chic 3212 Chicana Studies: La Chicana in Contemporary Society
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3410; 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 autoethography in the creation of Chicana subjectivity, identities, and aesthetics.
Chic 3275 Service Learning in the Chicano/Latino Community

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CHIC 1275; Meets CLE req of Civic Life and Ethics
Instructor: Ganley, Kathleen Marie
Description: This course is premised on the notion that there are many institutional and social constraints and limitations within schools that block equitable educational opportunities and outcomes for Latino students. It is also based on the idea that students who fail to learn in our schools and fail to graduate are our responsibility. In this course, you will be asked to think and act as you contribute to youth education. You will study the education of Chicanos/Latinos in the United States through the integration of academic materials, discussion, guest speakers and visits to the community while doing community service in an educational setting with Latino youth. Over the course of the semester, you will provide 36 hours of tutoring and mentoring in culturally grounded programs. You will analyze the education of Chicanos/Latinos while reflecting on issues such as equality, language usage, graduation statistics, college enrollment, various educational methodologies, special challenges faced by immigrants, and current legislation to create change. Students will also use what they learn in this course to affect legislative change. This course meets the Liberal Education Requirements in Civic Life and Ethics (theme).
Style: 20% Lecture, 40% Discussion. Presentations, Web-CT
Grading: 20% reports/papers, 10% in-class presentation, 10% class participation, 10% problem solving, 50% other evaluation. Tutoring at community site

Chic 3352 Transnational Chicana/o Theory: Global Views/Borderland Spaces

3 credit(s);
Instructor: STAFF
Description: CHIC 3352: Transnational Chicana/o Theory: Global Views/Borderland Spaces ?The U.S.-Mexican border es una herida abierta (is an open wound) where the Third World grates against the first and bleeds. And before a scab forms it hemorrhages again, the lifeblood of two worlds merging to form a third country? a border culture.? --Gloria Anzaldua, Borderlands/La Frontera The words of scholar activist Gloria Anzaldua underscore the long history of cultural clashes, political inequality, economic competition, and social struggle in the U.S.-Mexico borderlands. Blurring the line between American, Chicano and Latin American Studies, we will take Anzaldua?s observations as a starting point to explore the conflict-ridden and violent historical development of the U.S.-Mexico border, the related political and economic dynamics of ?transnationalism? and the cultural and social expressions exerted by people living in the ?borderlands.? By exploring issues such as conquest, racial violence, immigration, border policing, and the exchange of everything from culture to contraband, students examine how people and communities sought to create notions of belonging in their rapidly changing position between the first and third world. Such solutions included hybrid cultural expressions, cross-border community formation, ethno-racial politics, and transnational identities. Students will explore the themes in three segments: 1) The Border as a Literal Site of National Division and Power, 2) The Borderlands as a Hybrid Figurative State-of-being, and 3) Border Communities, Identities and Struggles. By employing an interdisciplinary approach including history, folklore, literary studies, ethnography, and policy analysis we will seek to identify the many ways ?borders? and ?borderlands? have been conceived to engage significant debates about the U.S.-Mexico border and the transnational world we now live in.

Chic 3375 Folklore of Greater Mexico

3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Topete, Daniel
Description: Student may contact the instructor or department for information.

Chic 3423 Central American Revolutions

A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 3423;
Instructor: Mcnamara, Patrick J
Description: Throughout the 1970s and 1980s, civil war and political violence swept the Central American isthmus. In an attempt to understand both the domestic and international factors that contributed to this upheaval, this course will examine the social, political, and economic issues that have shaped Central American history for nearly two centuries. We will focus primarily on the influences of colonial histories, capitalist development, ethnic and racial conflict, foreign intervention, the Catholic Church, and civil war throughout the region. We will emphasize both nation-state formation from the perspective of six independent countries (El Salvador, Guatemala, Honduras, Panama, Costa Rica, and Nicaragua), and broader region-wide experiences around export capitalism, military interventions, armed uprisings, popular protest, emigration, and ethnic conflict. The course is organized around these two major approaches. We will begin with a comparative region-wide perspective as, "The Isthmus of Central America: Colonialism, Revolution, and the Struggle for Autonomy." We will then focus on the six independent nations in the course section called, "The Nations of Central America: Independence, Nationalism, and the Struggle for Citizenship."
Style: 70% Lecture, 30% Discussion.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% class participation.
Exam Format: essay exams

Chic 3444 Chicana and Chicano History: 1821-1945
3 credit(s); Credit will not be granted if credit has been received for: HIST 3441; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: STAFF
Description: This course examines the experiences of people of Mexican descent in the U.S. The course provides a foundation for understanding the central role of Chicana/os in the history, culture, and politics of the U.S. Students will survey the major challenges faced by people of Mexican descent in the U.S. in order to critically discuss the social, economic, cultural, and political changes that have influenced the day-to-day life of Chicana/os and how Chicana/os have asserted themselves as agents of change.

Chic 3507W Introduction to Chicana/o Literature
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3507W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Estrada-Perez, Jesus O.
Description: Throughout this course, students will learn how queer Chicana/o identities and sexualities are negotiated and constructed within the context of Mexican, U.S., and mainstream Gay cultural traditions through literature. Specifically, we will work to unearth the cultural, social, political, and literary traditions and practices within Queer Chicana/o literature to gain a better understanding of the connections between race, class, gender, sexuality as experienced by queer Chicanas/os. As a class, we will also put this literature into larger academic context by interrogate how queer theory converges and diverges from traditional Chicana/o and mainstream gay and lesbian literary conventions and themes. By the end of this course, students will have a solid grasp of queer theory, Chicana/o theory, and dominant literary traditions within queer Chicana/o text and employ this knowledge in an original and in-depth analysis of literary content.

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 3672 Chicana/o Experience in the Midwest
3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Duenes, Michael
Description: Student may contact the instructor or department for information.

Chic 3852 Chicana/o Politics
3 credit(s); Credit will not be granted if credit has been received for: POL 3752; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: STAFF
Description: Explores the theory and practice of Chicana/o politics through an analysis of Mexican American experience, social agency, and response to larger political systems and behaviors using social science methods of inquiry. Looks at unequal power relations, social justice, and the political economy.

Chic 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 4231 Color of Public Policy: African Americans, American Indians, Asian Americans & Chicanos in the U.S.
3 credit(s); Credit will not be granted if credit has been received for: AFRO 4231;
Instructor: Brewer, Rose Marie
Description: This course is designed to familiarize students with the history of U.S. public policy development and social relations across racial-ethnic-nation cultures. The focus will be on the United States, but recent developments from the global context will be incorporated for comparative purposes. In this course we will examine the structural and institutional conditions through which people of color have been systematically marginalized, and how diverse populations have fought for and won or lost policy change. The course will help students better understand and interpret the "dominant paradigm" in
which public policy has been set. Then, we will examine how and why this paradigm has shifted over time, and what the current prospects are for policy transformation in the domestic and global arenas.

**Style:** 20% Lecture, 40% Discussion. community research

**Grading:** 20% final exam, 30% reports/papers, 20% class participation, 30% other evaluation. community research

**Exam Format:** take-home

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**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.

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**Chic 5920 Topics in Chicana(o) Studies: Subjectivity, Power and Resistance**

- **3 credit(s);**
- **Instructor:** Patino Jr, Jimmy Charles
- **Description:** Student may contact the instructor or department for information.

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**Chic 5993 Directed Studies**

- **1-3 credit(s), max credits 16, 16 completions allowed;**
- **Instructor:** Torres PhD, Eden E.
- **Description:** Student may contact the instructor or department for information.

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**Child Psychology** **104 Child Development**

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**CPsy 1904 Freshman Seminar: Global Perspectives: International & Cross-cult Studies of Childhood**

- **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.

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**CPsy 2301 Introductory Child Psychology**

- **4 credit(s);4 cr intro psychCredit 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
- **Grading:** See attached syllabus
- **Exam Format:** Supervised, in-person (not online) exams.

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**CPsy 2301 Introductory Child Psychology**

- **4 credit(s);4 cr intro psychCredit will not be granted if credit has been received for: CPSY 3301;**
- **Instructor:** Warren, Henriette
- **Description:** This undergraduate survey course will examine social and cognitive development from the prenatal period through adolescence. The major goals include fostering an understanding of the usefulness of a developmental approach to psychological issues, and familiarizing students with current research and methodology in child psychology. This course emphasizes normal physical, cognitive, emotional, and social development. Class sessions will include a mixture of lectures, discussion, videos, and group activities.
- **Style:** 80% Lecture, 10% Discussion. instructional videos
- **Grading:** 50% mid exam, 20% final exam, 15% reports/papers, 5% class participation, 10% laboratory evaluation.
- **Exam Format:** multiple choice
CPsy 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: Ahumada, Sandra
Description: Student may contact the instructor or department for information.

CPsy 3301 Introductory Child Psychology for Social Sciences
4 credit(s); Credit will not be granted if credit has been received for: CPSY 2301;
Instructor: Warren, Henriette
Description: This undergraduate survey course will examine social and cognitive development from the prenatal period through adolescence. The major goals include fostering an understanding of the usefulness of a developmental approach to psychological issues, and familiarizing students with current research and methodology in child psychology. This course emphasizes normal physical, cognitive, emotional, and social development. Class sessions will include a mixture of lectures, discussion, videos, and group activities.
Style: 80% Lecture, 10% Discussion, instructional videos
Grading: 40% mid exam, 20% final exam, 25% reports/papers, 5% class participation, 10% laboratory evaluation.
Exam Format: multiple choice

CPsy 3301 Introductory Child Psychology for Social Sciences
4 credit(s); Credit will not be granted if credit has been received for: CPSY 2301;
Instructor: Ahumada, Sandra
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: Elieff, Chryle Ann
Description: Student may contact the instructor or department for information.

CPsy 4303 Adolescent Psychology
A-F only, 3 credit(s);
Instructor: Esposito, Elisa A
Description: Student may contact the instructor or department for information.

CPsy 4310 Special Topics in Child Development: Tattling to Whistle Blowing: Developmental Perspec
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Mazzocco, Michele M
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
Description: Student may contact the instructor or department for information.

CPsy 4331 Social and Personality Development
A-F only, 3 credit(s);
Instructor: Warren, Henriette
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: Sera PhD, Maria D
This course is designed to introduce undergraduates to the study of cognitive development. Psychologists undertake this study with a variety of theoretical perspectives, and methodologies. In this course, students will learn about those themes and methods, where they originated and how they are embodied in contemporary research. The course is organized into four sections: Perceptual Development; Piaget’s Theory; Information-Processing Approaches, and Language Development. No section will be covered in depth, but instead, a general overview of the major issues, methods, and findings in each area will be provided. The primary reading for the course will be a book entitled “Children's Thinking”, written by Robert Siegler in 1998.

Style: 100% Lecture.
Grading: 30% final exam, 70% other evaluation. 3 in-class exams (+ final)

**CPsy 4345 Language Development and Communication**
- A-F only, 3 credit(s);
- Instructor: Cole, Caitlin Ann
- Description: Student may contact the instructor or department for information.

**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: Lister, Marie Louise Opsahl
- Description: Student may contact the instructor or department for information.

**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: Maratosos, 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: Englund, Michelle 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: 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: 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
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: Criswell, Elizabeth F
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: Thompson, Ross
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: Carlson, Ann Ruhl
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 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: Thomas, Kathleen 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: Zelazo, Philip David
Description: Student may contact the instructor or department for information.

CPsy 8321 Seminar in Teaching Developmental Psychology
1 credit(s);
Instructor: Elieff, Chryle Ann
Description: Student may contact the instructor or department for information.

CPsy 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.

CPsy 8994 Research Problems in Child Psychology
1-6 credit(s), max credits 24, 24 completions allowed;
Instructor: Elison, Jed T.
Description: Student may contact the instructor or department for information.
Chn 1011 Beginning Modern Chinese I
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 I
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 I
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: Stone, Jin YaLiang
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 I
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
Chn 3031 Advanced Modern Chinese I
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 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 I
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 4003 Intermediate Modern Chinese I
3 credit(s); 4002, grad student Credit will not be granted if credit has been received for: CHN 3021; 
Instructor: Stone, Jin YaLiang 
Description: This is the first half of a two-semester sequence in second year modern standard Chinese (Mandarin). It is designed for students who have completed Chn 1012 or 1015 at the U of M, or the equivalent. It will help students improve their ability to understand, speak, read, and write Chinese, and particularly aims at helping students enlarge their vocabulary and learn more complex sentence structures. Students will also be trained to write good compositions to express their views. Those who have not completed Chn 1012 or 1015 at the U of M, but wish to enroll in this course, need the instructor's approval. Textbook: "Integrated Chinese", by Yuehua Liu, et al, Cheng & Tsui Company, 1997.

Chn 4005 Accelerated Beginning Modern Chinese
3 credit(s); Grad student, instr consent; oral/aural skills or other Chinese dialect recommended credit will not be granted if credit received for: 1011, 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
Chn 4007 Advanced Modern Chinese I

3 credit(s); 4007, 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 4041 Advanced Readings in Modern Chinese I

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?fs 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?fs 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 Sh?fs insights in Chinese people?fs characteristics, the problems of the institution, age and gender oppression, and the cause of China?fs 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 5211 Introductory Classical Chinese I
3 credit(s); Two years of an East Asian language (Chinese, Japanese, Korean) or equivalent or instr consent credit will not be granted if credit received for: Chn 3111 or CHN 5211Credit will not be granted if credit has been received for: JPN 5211;
Instructor: Rouzer, Paul F
Description: An introduction to the vocabulary and grammar of classical (literary) Chinese, taught through analysis and translation of early Chinese texts. The course is conducted in English and is open to students who are moderately comfortable with Chinese characters (the equivalent of at least two years of study in Chinese, Japanese, Korean or Vietnamese recommended). Reading includes short anecdotes from Han-era texts; selections from Sima Qian’s biographies; and further materials to be announced.
Style: 25% Lecture, 75% Discussion.
Grading: 25% mid exam, 35% final exam, 15% quizzes, 25% class participation.
Exam Format: Take home translation

Chn 5393 Directed Study
1-5 credit(s), max credits 18, 18 completions allowed;
Instructor: STAFF
Description: Directed Studies in ALL and Asian languages are restricted to very special conditions, with the particulars established by the individual teacher upon department approval. Note: Directed Studies cannot be used to fulfill the core requirements of either the Major or Minor.

Civil Engineering 122 Civil Engineering Building

CE 1101 Orientation to Civil, Environmental, and Geo-Engineering
S-N only, 1 credit(s);
Instructor: Marasteanu, Mihai
Description: Student may contact the instructor or department for information.

CE 3101 Computer Applications in Civil Engineering I
A-F only, 3 credit(s);
Instructor: Barnes, Randal J
Description: Student may contact the instructor or department for information.

CE 3102 Uncertainty and Decision Analysis in Civil Engineering
A-F only, 3 credit(s);
Instructor: Davis, Gary Arnold
Description: Student may contact the instructor or department for information.

CE 3111 CADD for Civil Engineers
S-N only, 2 credit(s);
Instructor: Johnson, Ann M
Description: Introduction to AutoCAD and Civil 3D software. Students complete all tasks to design a two-lane roadway and simple subdivision using civil engineering design software, including topography, plan/profile, contours, and cross sections.

CE 3201 Transportation Engineering
3 credit(s);
Instructor: Levinson, David M
Description: The plot of the course is "How does an idea become a road". It begins with transportation planning (where ideas for roads (or other transportation facilities) are generated, proceeds to queueing, traffic flow analysis, and level of service, where the size (width) of the road is determined. CE3201 comprises two components: lecture, which meets twice a week for 50 minutes, and lab (section) which meets three times a week for 50 minutes, though each student is in one of three sections. The lab employs computer-based simulations to allow students to “learn by doing” and get a different perspective on transportation engineering than solving homework problems provides. Each lecture includes both traditional lecture component, to convey material, highlight important points, and review questions students may have, and in-class problems, to attempt to engage students in active learning.
Style: 35% Lecture, 10% Discussion, 35% Laboratory, 15% Student Presentation, 5% Guest Speakers.
Grading: For CE3201, there are six "wedges" which each must be achieved. These are: Homework, Lab, Project,
Participation, Quizzes, Final Exam. In order to fill a wedge, you need to obtain at least 2/3 of possible points.

Exam Format: In-class, Closed book, with equations provided. Short answer plus problems.

**CE 3202 Surveying and Mapping**
- A-F only, 2 credit(s);
- Instructor: Johnson, Ann M
- Description: Theory of precision measurements of distance, elevation, angle, and direction of points and lines above, on, or beneath the earth’s surface; establishing such points or lines. Elements of coordinate systems, datum planes, and maps.

**CE 3301 Soil Mechanics I**
- A-F only, 3 credit(s);
- Instructor: 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: Schillinger, Dominik
- 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: 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: Khazanovich, Lev
- 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: Arnold, Bill
- 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: 30% mid exam, 15% final exam, 20% reports/papers, 8% quizzes, 27% problem solving.
- Exam Format: Short answer and problem solving

**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 3541 Environmental Engineering Laboratory**
- A-F only, 3 credit(s);
- Instructor: Surdo, Erin Mehleis
- 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 4011 Special Topics: CE 3502 for graduate students
A-F only, 3 credit(s), max credits 12, 3 completions allowed;
Instructor: Hill, Kimberly M.
Description: Student may contact the instructor or department for information.

CE 4011 Special Topics: CPT for International Students
A-F only, 1 credit(s), max credits 12, 3 completions allowed;
Instructor: Marasteanu, Mihai
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 for Civil Engineering
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: Khazanovich, Lev
Description: Student may contact the instructor or department for information.

CE 4301 Soil Mechanics II
A-F only, 3 credit(s); [[3301 or GeoE 3301], upper div CSE] or instr consent Credit will not be granted if credit has been received for: GEOE 4301;
Instructor: Gonella, Stefano
Description: Student may contact the instructor or department for information.

CE 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 4311 Rock Mechanics
A-F only, 4 credit(s);
Instructor: Labuz, Joseph F
Description: Student may contact the instructor or department for information.
CE 4401 Steel and Reinforced Concrete Design
A-F only, 4 credit(s);
Instructor: French, Catherine Ellen
Description: Student may contact the instructor or department for information.

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: Voller, Vaughan Richard
Description: Student may contact the instructor or department for information.

CE 4501 Hydrologic Design
A-F only, 4 credit(s);
Instructor: Voller, Vaughan Richard
Description: Student may contact the instructor or department for information.

CE 4502 Water and Wastewater Treatment
A-F only, 3 credit(s);
Instructor: LaPara, Timothy M
Description: Student may contact the instructor or department for information.

CE 4512 Open Channel Hydraulics
A-F only, 4 credit(s);
Instructor: Mohseni, Omid
Description: Open channel flow theories, conservation of mass, momentum and energy principles, design of canals using the concepts of uniform flow and gradually varied flow conditions, design of culverts and analyzing flows through hydraulic structures, e.g. spillways and bridges, and an introduction to the principles of unsteady one-dimensional flows in open channel problems.
Style: 75% Lecture, 20% Discussion, 5% Demonstration.
Grading: 25% mid exam, 35% final exam, 20% reports/papers, 20% written homework.

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: Introduction to the Mechanics of Sediment Transpor
A-F only, 3 credit(s), max credits 4, 3 completions allowed;
Instructor: Hill, Kimberly M.
Description: Student may contact the instructor or department for information.

CE 5180 Special Topics: Field methods in water quality
A-F only, 3 credit(s), max credits 4, 3 completions allowed;
Instructor: LaPara, Timothy M
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.

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**CE 5213 Transit Planning and Management**  
A-F only, 3 credit(s);  
Instructor: Grams, Lyssa Leitner  
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: Shield, Carol K  
Description: Student may contact the instructor or department for information.

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

**CE 5415 Masonry Structures**  
A-F only, 3 credit(s);  
Instructor: Schultz, Arturo Ernest  
Description: Student may contact the instructor or department for information.

**CE 5541 Environmental Water Chemistry**  
A-F only, 3 credit(s), max credits 4, 1 completion allowed;  
Instructor: Arnold, Bill  
Description: Water is a critical component of environmental systems, and the chemistry that occurs in water is a rich subject. This class focuses on water chemistry in both natural and engineered systems. Topics covered include acids and bases, titrations, the carbonate system, solubility of minerals, metal ion complexation, oxidation/reduction chemistry, chemistry in water treatment, nutrient cycling, organic matter, and organic pollutants. Both chemical equilibrium and chemical kinetics are explored. Students will be introduced to software that can be used to solve water chemistry problems. The class is targeted at seniors and graduate students.

**Style:** 100% Lecture.

**Grading:** 40% mid exam, 30% final exam, 30% written homework.

**Exam Format:** in class, closed book

**CE 5551 Environmental Microbiology**  
A-F only, 3 credit(s);  
Instructor: Novak, Paige J  
Description: Student may contact the instructor or department for information.

**CE 5571 Acara Global Venture Design: Grand Challenges**  
A-F only, 3-4 credit(s), max credits 8; Meets CLE req of Global Perspectives  
Instructor: Nord, Tobin Lawrence  
Description: Social-environmental venture solution design course to address global grand challenges

**CE 5571 Acara Global Venture Design: Grand Challenges**  
A-F only, 3-4 credit(s), max credits 8; Meets CLE req of Global Perspectives  
Instructor: Marshall, Julian  
Description: Social-environmental venture solution design course to address global grand challenges

**CE 5573 Design for Sustainable Development: Create II**
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 8213 Advanced Transportation Technologies Seminar
S-N only, 1 credit(s); Credit will not be granted if credit has been received for: ME 8772;
Instructor: Donath, Max
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: Mogilevskaya, Sofia
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: Linderman, Lauren Elizabeth
Description: Student may contact the instructor or department for information.

CE 8402 Nonlinear Finite Element Analysis
A-F only, 3 credit(s);
Instructor: Stolarski, Henryk Konstanty

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

CE 8490 Special Topics: Stochastic Geomorphology
A-F only, 4 credit(s), max credits 8;
Instructor: Foufoula, Efi
Description: Student may contact the instructor or department for information.

CE 8508 Ecological Fluid Mechanics
A-F only, 4 credit(s);
Instructor: Hondzo, Miki
Description: Student may contact the instructor or department for information.

CE 8511 Mechanics of Sediment Transport
A-F only, 3 credit(s); 3502 and 4501 or instr consent Credit will not be granted if credit has been received for: ESCI 8511;
Instructor: Hill, Kimberly M.
Description: Student may contact the instructor or department for information.

CE 8521 The Atmospheric Boundary Layer
A-F only, 4 credit(s);
Instructor: Guala, Michele
Description: Student may contact the instructor or department for information.

CE 8601 Introduction to Stream Restoration
**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: Smith, Stephen
Description: "We are all Greeks." When the Greeks rebelled against the Ottoman Empire in the 1820s, volunteers from across Europe eagerly joined the fight?not just to liberate an oppressed people, but also to restore to its rightful place in the world the land they saw as the birthplace of art, literature, science, and philosophy. The Romans had cheerfully acknowledged that they were the cultural captives of the conquered Greeks; the educated elites of the Renaissance followed the example of the Greeks in the visual arts and, in an attempt to revive the genre of tragedy, created opera; the Enlightenment of the 18th century brought with it experiments in democracy, the form of government based on the rule of the people; the nineteenth-century Romantics celebrated the glories of Homer?s epics. In our own time, movies, television shows, and even graphic novels bear witness to the fascination which has surrounded Greece for over 2000 years. * * * This course will survey over 1000 years of Greek culture and history, from its beginnings in the palace-culture of the Bronze Age, through the glory days when Athens and Sparta led the fight against the seemingly unstoppable Persians, to the gradual absorption of the Greek world into the empire of the Romans. We'll try to understand the Greeks through their own writings and monuments, including such highlights as Homer?s Iliad, the panhellenic sanctuaries of Olympia and Delphi, Sophocles? tragedies, and Plato?s explorations of love and justice. We'll also spend some time talking about signs of Greek influence in our own society and culture. * * * This course meets the liberal education requirement for historical perspectives. We will be considering not only the "facts" of the Greek world but also how those facts are determined, at least in part, by the questions we ask about the evidence. We will also examine the ways in which our own understanding of the world influences how we look at the Greeks.
Style: 100% Lecture
Grading: 40% mid exam, 30% final exam, 10% quizzes, 20% journal.
Exam Format: Multiple choice and short answer; final exam also has a brief essay. Exams are not cumulative except for essay on final exam.

**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 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.

**Grading:**
- 20% mid exam, 30% final exam, 15% reports/papers, 35% class participation.

**Exam Format:** Short answer/essay

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**CNES 1201 The Bible: Context and Interpretation**  
3 credit(s); Credit will not be granted if credit has been received for: RELS 3201; Meets CLE req of Literature  
**Instructor:** STAFF  
**Description:** The Hebrew Bible and Old Testament are literary collections that modern Jewish and Christian traditions maintain as important, but these collections were initially produced by ancient Israelite scribes who composed and/or compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

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**CNES 1903 Freshman Seminar: Homer's Odyssey/Politics of Early Greek Society**  
3 credit(s); Meets CLE req of Civic Life and Ethics  
**Instructor:** Olson, S. Douglas  
**Description:** Student may contact the instructor or department for information.

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**CNES 1905 Freshman Seminar: Silencing the Gods: Divine & Human in Hebrew Bible**  
3 credit(s);  
**Instructor:** Levinson, PhD, Bernard M.  
**Description:** Student may contact the instructor or department for information.

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**CNES 3071 Greek and Hellenistic Religions**  
3 credit(s); Credit will not be granted if credit has been received for: CNES 5071; Meets CLE req of Historical Perspectives  
**Instructor:** Sellew, Philip  
**Description:** A survey of ancient Greek religion from the Bronze Age down to Hellenistic times. The approach is both historical and thematic. Topics include pre-historic religion; Homer and the Olympian deities; archaeology of cult; music, dance, and procession as ritual performance; prayer and sacrifice; temple architecture and sanctuaries; oracles; beliefs about death and the afterlife; mystery cults; philosophical religion; criticism of traditional myths; Alexander and ruler cult; astrology and magic; and Near Eastern salvation religions. We pose questions of Greek tragedy and comedy, satire and pious hymnody. Extensive use of Homer, Sappho, Pindar, Aeschylus, Euripides, and Plato allows us to hear distinct voices within the overall Greek social and religious variety. We study the use of architectural space to define and express divisions between sacred and profane. The visual arts are of central importance, to help us both `see' these foreign or familiar gods and goddesses heroes and heroines, as well as `query' the ordering principles they represent. Sculpture, vase painting, gems, and coins are all brought into the picture.

**Style:** 85% Lecture, 10% Discussion, 5% Field Trips.

**Grading:**
- 15% mid exam, 20% final exam, 45% reports/papers, 5% special projects, 15% additional semester exams.

**Exam Format:** Brief IDs and short answer questions; one essay.

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**CNES 3072 The New Testament**  
3 credit(s); Credit will not be granted if credit has been received for: RELS 3072;  
**Instructor:** STAFF  
**Description:** This course will introduce the basics of reading the New Testament and contextualizing these writings within their ancient political, social, religious and cultural contexts. We will attend to the details of the genre, literary features (language, imagery, metaphors, plot, setting, characterization and rhetoric), and religious dimensions of these texts in order to appreciate the varied perspectives within the collection of documents that make up the New Testament. We will also introduce various modern critical methods of biblical interpretation. Taught by Prof. Stephen Ahearne-Kroll.
CNES 3082W Greek Tragedy in Translation
3 credit(s);Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Cole,Spencer E
Description: This course explores Greek and Roman tragedy in their original cultural contexts and also considers how ancient tragic drama has been re-imagined throughout the world on the stage and in cinema. Through close analysis of major tragic texts, it examines how both ancient and modern cultures have used tragic drama as a vital medium to explore key human concerns: justice (human and divine), individual identity, self and society, marriage and families, immigration and cultural assimilation, sexuality, gender, and death. To gain a more comprehensive understanding of tragic drama, subjects studied also include ancient theaters, theatrical production, and dramatic festivals as well as ancient and modern critical analysis of the tragic form and its development. Readings include: Aeschylus, Sophocles, Euripides, Aristophanes, Seneca, Aristotle, Nietzsche, and Freud.

CNES 3107 Age of Constantine the Great
3 credit(s);
Instructor: Nicholson,Oliver
Description: It is given to few deliberately to change the course of history. Constantine the Great (A.D. 306-37) was a conviction politician who adopted Christianity as his imperial religion and ended up making illegal the sacrifices which had been the core of Roman religion since time immemorial. The emperor seems to have thought the transition from paganism to Christianity would be easy; those who take this course will be able to consider how wrong he was. Constantine is at the centre of this course, but there is more to him, and to the course, than his religious revolution. We will range over the politics and culture of the years between about 250 and 363 A.D., considering the political and economic crisis of the Roman Empire in the 3rd century and its resolution by Constantine's immediate predecessors. Neoplatonic philosophy, the last Great Persecution of the Christians, art and literature as well as such phenomena as the rise of monasticism and the popularity of pilgrimage to the Holy Land. Nor will our focus be wholly on the Mediterranean Basin. We will use Persian sources to consider the politics, religion (Zoroastrianism) and art of the other great empire of the era, the Sassanian monarchy which ruled what is now modern Iran, Iraq and Afghanistan. We will consider the Germanic barbarians who threatened the Roman frontiers on the Rhine and Danube rivers. This vast diversity of folk we will read about, so far as is possible, in texts written at the time.
Style: lecture and discussion
Grading: 10% mid exam, 40% final exam, 50% reports/papers.
Exam Format: 'gobbets' - passages of ancient authors set for comment

CNES 3152 Art and Archaeology of Ancient Greece
3 credit(s);Credit will not be granted if credit has been received for: ARTH 3152;Meets CLE req of Historical Perspectives
Instructor: Canepa,Matthew P.
Description: This course will provide an introduction to the history of Greek art, architecture and archaeology from the formation of the Greek city states in the ninth century BCE, through the expansion of Greek culture across the Mediterranean and Asia in the Hellenistic period, to the coming of Rome in the first century BCE. While this survey concentrates on the main developments of Greek art, an important sub-theme of this course this is the changes Classical visual culture underwent as it served non-Greek peoples, including the role it played for Alexander and his successors in forging multiethnic, globally minded empires in Western, Central and South Asia. No background in the time period or discipline is expected and therefore this class will also serve as an introduction to interdisciplinary study of art history and the classical world. A number of art historical methodologies will be introduced in order to not only give students a useful background in art history but to give them the tools to think as art historians and incorporate related visual and textual evidence meaningfully into their writing.

CNES 3201 The Bible: Context and Interpretation
3 credit(s);Knowledge of Hebrew not requiredCredit will not be granted if credit has been received for: RELS 3201;Meets CLE req of Literature
Instructor: STAFF
Description: The Hebrew Bible and Old Testament are literary collections that modern Jewish and Christian traditions maintain as important, but these collections were initially produced by ancient Israelite scribes who composed and/or compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical
texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

**CNES 3204 The Dead Sea Scrolls**
3 credit(s); Credit will not be granted if credit has been received for: JWST 3204;
Instructor: STAFF
Description: In the mid-twentieth century, fragments from roughly 900 manuscripts (or scrolls) were discovered in caves near the Dead Sea; they date from the late third century B.C.E. to the first century C.E., and the vast majority were composed in Hebrew (some in Aramaic and even fewer in Greek). In reading selected portions of these scrolls (in translation), this course will focus on the key ways that the discovery of these scrolls significantly changed the study of Judaism during Hellenistic and Roman rules. Namely, the course will examine how the scrolls have changed scholars' views about the transmission of biblical texts in antiquity and the extent to which the literary production of Jewish authoritative writings continued during this time period. The course will also examine the Jewish sectarian writings of the Dead Sea Scrolls and the scholarly debate about the archaeological site of Qumran, which was a settlement near some of the caves where the scrolls were found.

**CNES 3502 Ancient Israel: From Conquest to Exile**
3 credit(s); credit will not be granted if credit already received for: ANE 3502/5502, RelA 3502/5502
Credit will not be granted if credit has been received for: CNES 5502;
Instructor: von Dassow, Eva
Description: Israel and Judah were not states of great importance in the ancient Near East. Their population, territory, and economy were small, and they could not resist conquest by larger, more powerful states like Assyria and Rome. So why is their history significant still? The historical experiences of the people of ancient Israel and Judah were transmogrified in literary form into the Hebrew Bible (Old Testament), which became the foundation and wellspring for much of Western and Islamic civilization. Innumerable aspects of modern history and culture are predicated on some element of Israel's ancient past, as mediated to us through the Bible; so it behooves us to understand that past. But the Bible is a religious work, not a transcript of events, and it is not the only source of information about ancient Israel. Archaeological excavations have revealed the physical remains of the cultures of Israel and neighboring lands, as well as bringing to light documents, inscriptions, and literary works produced by these cultures. This course treats the history of ancient Israel and Judah from the Late Bronze Age through the period of Roman rule, on the basis of archaeological, epigraphic, and literary sources. Historical study entails inquiring into the ideology of the sources, including the Bible. Implicit in the methods of inquiry are questions about how historical knowledge is created. Students taking the course for graduate credit will do additional reading and a research paper.
Style: 60% Lecture, 40% Discussion.
Grading: 20% final exam, 45% reports/papers, 20% quizzes, 15% class participation.
Exam Format: Essays, short IDs, maps

**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: Levinson PhD, Bernard M.
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 5188 Art and Archaeology of Early Christianity and the Late Roman Empire
3 credit(s);
Instructor: Canepa,Matthew P.
Description: This course will provide graduate students and advanced undergraduates a foundation in the art, architecture and archaeology of the Roman empire and wider late ancient world from ca. 200 CE to 650 CE. We will begin with the Severans and pay special attention to the crisis of the third century, focusing on the age of the Tetrarchs, the transformation of imperial art and architecture under Constantine the Great and the age of Justinian I. Throughout the course we will analyze the transformation of Old Rome and growth and development of the city of New Rome (Constantinople) from its founding by Constantine the Great, its growth under the Theodosian dynasty and its recreation by Justinian in the sixth century. This course will also examine the emergence of a Christian visual culture within that of Rome and subsequent
Christianization' of Rome throughout all spectra of Roman society from the emperor to slaves, as well as the continued vitality of Classical visual culture. The course will examine the development and cultural contexts of liturgical, architectural and visual environments of the Christian church, and examine the melding of imperial and Christian art, architecture and ritual. Other topics include the development of the early icon, church architecture in Italy and N. Africa and Spain, manuscript painting, and Christian art and architecture in late antique Armenia, Mesopotamia and Asia.

CNES 5502 Ancient Israel: From Conquest to Exile
3 credit(s); credit will not be granted if credit already received for: ANE 3502/5502, RelA 3502/5502 Credit will not be granted if credit has been received for: CNES 3502;
Instructor: von Dassow, Eva
Description: Israel and Judah were not states of great importance in the ancient Near East. Their population, territory, and economy were small, and they could not resist conquest by larger, more powerful states like Assyria and Rome. So why is their history significant still? The historical experiences of the people of ancient Israel and Judah were transmogrified in literary form into the Hebrew Bible (Old Testament), which became the foundation and wellspring for much of Western and Islamic civilization. Innumerable aspects of modern history and culture are predicated on some element of Israel's ancient past, as mediated to us through the Bible; so it behooves us to understand that past. But the Bible is a religious work, not a transcript of events, and it is not the only source of information about ancient Israel. Archaeological excavations have revealed the physical remains of the cultures of Israel and neighboring lands, as well as bringing to light documents, inscriptions, and literary works produced by these cultures. This course treats the history of ancient Israel and Judah from the Late Bronze Age through the period of Roman rule, on the basis of archaeological, epigraphic, and literary sources.
Historical study entails inquiring into the ideology of the sources, including the Bible. Implicit in the methods of inquiry are questions about how historical knowledge is created. Students taking the course for graduate credit will do additional reading and a research paper.
Style: 60% Lecture, 40% Discussion.
Grading: 20% final exam, 45% reports/papers, 20% quizzes, 15% class participation.
Exam Format: Essays, short IDs, maps

CNES 5794 Introduction to Classical and Near Eastern Studies
S-N only, 1 credit(s);
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: 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: 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 5996 Directed Instruction
1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Ahearne-Kroll, Stephen P.
Description: Student may contact the instructor or department for information.

Clinical Laboratory Sciences Program
15-194 Phillips Wangensteen Bldg (MMC 711)

CLSP 4601W Management and Professional Issues
A-F only, 2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Spannaus-Martin, Donna J
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

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
A-F only, 3 credit(s);
Instructor: Bellcourt EdD, Mark A
Every human society has developed its own knowledge of food and health relationships. But until very recently, scientific researchers at large universities have paid little attention to this knowledge, in part because it has been dismissed as “unscientific.” Most professional scientists do not accept indigenous, ancestral or ancient knowledge systems as valid. When such knowledge is considered, it is studied through the lens of “science” to determine its legitimacy. Diverse food practices and understandings may be acknowledged as cultural artifacts, but are seldom seen by scientists as legitimate on their own merit. In this seminar, we will attempt to take a more culturally competent “inside look” at diverse ways of knowing. Experience is often the best teacher. By direct experience and involvement with another culture, we come to recognize their cultural worldview and its way of seeing and making sense of the world. In this way, you will encounter different ways of knowing. We will focus specifically on different cultural orientations to understanding food and health relationships. We will explore Indigenous knowledges, Ayurveda, Chinese Medicine, western/biomedical and African American perspectives. Each of these “ways of knowing” is grounded in distinct and divergent ancestral and cultural orientations.
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 3333 Insects, Microbes and Plants**
- **A-F only, 3 credit(s);** Meets CLE req of Technology and Society
- **Instructor:** Arenz, Brett Evan
- **Description:** Student may contact the instructor or department for information.

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

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

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

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

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

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

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

College of Liberal Arts 49 Johnston Hall

CLA 1001 CLA First-Year Experience I
S-N only, 1 credit(s); CLACredit will not be granted if credit has been received for: CLA 1001H;
Instructor: STAFF
Description: "CLA First Year Experience - Composing Your Worlds" CLA 1001 - CLA First-Year Experience I: Composing to Discover Students make the best educational decisions and have the most powerful learning experiences when they: - connect early - think reflectively - plan carefully. The CLA First-Year Experience is therefore designed to encourage students to make connections with learning opportunities as early as possible in their college career. It is a two-semester course (1 cr. each semester) designed to organize a variety of in-class and out-of-class learning experiences and reflection opportunities that will engage students in carefully charting their own educational path on the basis of their strengths, values, and life goals. In this work, we will encourage and support students in taking full advantage of the many campus resources as they develop, reflect on, and implement their educational plans.
Grading: Based on participation, and satisfactory completion of all work.
Exam Format: No exams

CLA 1005 Introduction to Liberal Arts Learning
A-F only, 3 credit(s);
Instructor: Williams,Andrew L
Description: CLA 1005 is designed to provide students a space and process to examine their academic and career interests and goals in relationship to their experiences, identities, personalities, strengths, competencies, ethics, and values. As part of this process, class participants will examine how contemporary American students understand their education, what they want from it, and how they negotiate and give meaning to their university experience. A critical part of course work will involve bringing an autobiographical and ethnographic lens to your freshman year experience. Our course goals are intentionally aligned with the University of Minnesota's student learning and development outcome goals which provide the framework for the undergraduate educational experience on the Twin Cities campus. More specifically, the student developmental outcomes which the University hopes students are able to increasingly demonstrate as they approach graduation are independence and interdependence, responsibility and accountability, goal orientation, self-awareness, resilience, appreciation of difference, and tolerance of ambiguity. The University also hopes that at the time of receiving a bachelor's degree students can effectively and creatively communicate their goals, strengths, and values to diverse audiences.
Style: 33% Lecture, 66% Discussion.

CLA 1902 Topics: Freshman Seminar: Media, Music & Movement in Pop Culture
A-F only, 3 credit(s), max credits 6; Meets CLE req of Diversity and Soc Justice US
Instructor: Squires,Catherine R
Description: Student may contact the instructor or department for information.

CLA 1904 Topics: Freshman Seminar: Stories, Bodies, Border-crossings
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Nagar,Richa
Description: Student may contact the instructor or department for information.

CLA 1905 Topics: Freshman Seminar: Living or Dead: The Performance of Things
A-F only, 3 credit(s);
Instructor: Scandura,Jani
Description: Student may contact the instructor or department for information.
A-F only, 3 credit(s);
Instructor: Werry, Margaret L
Description: This course looks at the life and death of everyday things. What happens when we don't take things for granted? What histories do they tell? How do they speak or feel? What do things want? Toys, clothes, props, prosthetics, human remains, and relics, icons, hoards, freaks, and fetishes, kitsch, trash, and treasure; we will read about them, watch films that dwell on them, muse on art works, museum displays, and advertisements that animate them. The class will tour (real and imagined) museums, talk with collectors and curators, puppeteers and taxidermists. In assignments, students will build and display their own collections, research the stuff that fascinates them, and look deep beneath the surface of things.

CLA 1908W Topics: Freshman Seminar: Nature & Society in the Anthropocene
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Kost, Kiley M
Description: For those of us who spend winters in Minnesota, the specter of global warming seems remote (if not desirable!). Evidence about climate change and environmental degradation more broadly can be difficult to interpret from an everyday perspective, especially when the public gets information through an increasingly wide range of sources. Yet while environmental change on a global scale can feel distant and difficult to understand, the human transformation of the environment is so profound that it is the defining feature of a new geological era: the Anthropocene. Through a blend of the social sciences and humanities perspectives, this class explores the relationship between nature and the society that has produced such profound environmental transformation, and we consider how to rework that relationship in the future.
Style: 30% Lecture, 10% Film/Video, 50% Discussion, 10% Small Group Activities.
Grading: 55% reports/papers, 20% special projects, 25% class participation.

CLA 1910W Topics: Freshman Seminar: The Human as Writer
A-F only, 3 credit(s), max credits 6; Meets CLE req of Writing Intensive
Instructor: Wolfe, Thomas C
Description: Student may contact the instructor or department for information.

College of Science and Engineering 106 Lind Hall

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

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.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credit(s)</th>
<th>Instructor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>French, Catherine Ellen</td>
<td>Description: Student may contact the instructor or department for information.</td>
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<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Magner, Joe A</td>
<td>Description: Student may contact the instructor or department for information.</td>
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<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Flaten, James Alfred</td>
<td>Description: Student may contact the instructor or department for information.</td>
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<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Johnson, Ann M</td>
<td>Description: Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Pagel, Adam Paul</td>
<td>Description: Student may contact the instructor or department for information.</td>
</tr>
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<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Gbolo, Simone Zazama</td>
<td>Description: Student may contact the instructor or department for information.</td>
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<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Kakalios, James</td>
<td>Description: Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Francis, Lorraine F</td>
<td>Description: Student may contact the instructor or department for information.</td>
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<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Stadler, Bethanie J. Hills</td>
<td>Description: Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Kaveh, Mostafa</td>
<td>Description: Student may contact the instructor or department for information.</td>
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<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Kortshagen, Uwe Richard</td>
<td>Description: Student may contact the instructor or department for information.</td>
</tr>
<tr>
<td>CSE 1001 First Year Experience</td>
<td>A-F only, 1 credit(s);</td>
<td>Guzina, Bojan B</td>
<td>Description: Student may contact the instructor or department for information.</td>
</tr>
</tbody>
</table>
CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Barnes, Randal J
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Leger, James Robert
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Jones, Terry J
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Cramer, Katherine D
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Cooper, William L.
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Alexander, Jennifer Karns
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Sartori, John M
Description: Student may contact the instructor or department for information.

CSE 1001 First Year Experience
A-F only, 1 credit(s);
Instructor: Weimerskirch, Mike
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: Hogan, Chris
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: Akkin, Taner
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 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 1905 Freshman Seminar  
A-F only, 1 credit(s), max credits 2;  
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: 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-Kauf, Mike  
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: Schiappa, Jacqueline
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: Kohner, Natalie Woodward
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Bell, Shelby
Description: Student may contact the instructor or department for information.

Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Wambach, Tara E
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: Youngvorst, Lucas 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: 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: Ranachan, Kate
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: Mills, Anthony
Description: Student may contact the instructor or department for information.
Comm 1101 Introduction to Public Speaking
3 credit(s); Credit will not be granted if credit has been received for: WRIT 1223; Meets CLE req of Civic Life and Ethics
Instructor: Makstenieks, Scott Thomas
Description: Student may contact the instructor or department for information.

Comm 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: Weinzimmer, Lauren 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: Struth, Matthew S
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: Angelich, Christian 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: Danielson, Carly Marie
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: Pedelty, Mark Holmes
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: Anderson, Wendy K. Z.
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: Hammer, Carl Joseph
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: 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: Makstenieks, Scott Thomas
Description: Student may contact the instructor or department for information.

Comm 1905 Freshman Seminar: Communicating the Holocaust
A-F only, 3 credit(s), max credits 6;
Instructor: Gross, Alan G
Description: Schindler's List turns the Holocaust into Hollywood. But the Holocaust was nothing like that. Rather, it was a double tragedy: for the German people and the Jews of Europe. The first descended from the heights of culture to the despicable barbarism of which the second were the victims. In this seminar, in such films as Shoah, and memoirs like Survival in Auschwitz, you will hear these victims speak in their own voices. In such films as The Wannsee Conference and such books as Ordinary Men, you will hear their tormentors speak candidly about their experiences. These riveting accounts are not about unnamed millions, but about the temptations and tragedies of real people, victims and perpetrators who were as Nietzsche says, human, all too human.
Style: 40% Lecture, 20% Film/Video, 40% Discussion.
Grading: 100% quizzes.
Exam Format: there will be a weekly short essay exam

Comm 1905 Freshman Seminar: Social/Evolutionary Bases of Interpersonal Comm
A-F only, 3 credit(s), max credits 6;
Instructor: Koerner, Ascan Felix
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; Credit will not be granted if credit has been received for: COMM 3110H;
Instructor: Helwich, David A
Description: Student may contact the instructor or department for information.

Comm 3190H Honors Course: Research Seminar in Communication
A-F only, 3 credit(s), max credits 6;
Instructor: STAFF
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: Cormany, Diane Laura
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: Arcy, Jacquelyn H
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
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: 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: Wight, Jules
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: Bennett, Stephen L
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: Anderson, Sky LaRell
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: Hristova, Elena Dimitrova
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: Bedor, Emma
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
Description: COMM 3401 is an introduction to theory in communication studies. There are small sections of 3401, but students take 3401 as a large lecture course (120-180 students). In its large format, 3401 is lecture-based. 3401 covers scientific theories that focus on interpersonal communication. The communication theories we will discuss throughout the semester involve complex ideas that you have to explain, apply, critique and integrate in 3401 assignments and in future communication courses. What makes this course challenging is that it moves at a rapid pace: We will cover one theory per class session. You will learn some of the basic concepts from each theory by doing the reading; lecture will include extension and further exploration of theoretical ideas.
Style: 100% Lecture.
Grading: 20% mid exam, 20% final exam, 40% reports/papers, 20% written homework

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: Grayden,Elizabeth D
Description: Student may contact the instructor or department for information.

Comm 3412 Interviewing and Communication
A-F only, 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: Shada,Andrea
Description: Student may contact the instructor or department for information.

Comm 3411 Introduction to Small Group Communication
3 credit(s);
Instructor: Shada,Andrea
Description: Student may contact the instructor or department for information.
Comm 3422 Interviewing and Communication
   A-F only, 3 credit(s);
   Instructor: Hamilton,Joy
   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: Hansen,Wes
   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: Hiland,Alexander Scott
   Description: Student may contact the instructor or department for information.

Comm 3635W Famous Speeches
   A-F only, 3 credit(s);Meets CLE req of Writing Intensive
   Instructor: Tucker,David P
   Description: Student may contact the instructor or department for information.

Comm 3645W How Pictures Persuade
   A-F only, 3 credit(s);Meets CLE req of Writing Intensive
   Instructor: Ranachan,Kate
   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 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 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Vavrus, Mary D 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Sheldon PhD, Amy 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Hewes, Dean E 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Isaacs, Alyssa Marie 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Greene, Ronald Walter 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Galarneault, Stephanie M 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Jones, Susanne Margarethe 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Neuman-Scott, Mark A 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Ranachan, Kate 
Description: Student may contact the instructor or department for information.

Comm 3995W Major Project  
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Meets CLE req of Writing Intensive 
Instructor: Prasch, Allison M. 
Description: Student may contact the instructor or department for information.

Comm 4204 Producing for Television: Theory and Practice
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 4404W Language Borderlands
3 credit(s); Meets CLE req of Writing Intensive
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 own 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 4407 Communication and Conflict
A-F only, 3 credit(s);
Instructor: Hewes, Dean E
Description: Student may contact the instructor or department for information.

Comm 4471 Communication in Marriage and Family
3 credit(s);
Instructor: Isaacs, Alyssa Marie
Description: Student may contact the instructor or department for information.

Comm 5110 Special Topics in Communication Theory
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Greene, Ronald Walter
Description: Student may contact the instructor or department for information.

Comm 5110 Special Topics in Communication Theory
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Jones, Susanne Margareth
Description: In this senior-level seminar, we will examine how communication behaviors in interpersonal relationships improve our health and human functioning. Topics include gratitude, forgiveness, social support, appreciation, social networks and communicative contagion of mood. We will examine how these topics influence dyadic communication. Readings come from a variety of disciplines, including communication, psychology, management, sociology, positive psychology scholarship, and appreciative inquiry. Weekly activities include reading, field exercises, and journal writing. The course has two exams, and culminates with a happiness project presentation and research paper. Classes featuring happiness and communication are very new in the discipline. We will be encountering new literatures, asking innovative questions, and challenging each other to find and create fresh ideas. My hope is that we will enjoy this adventure together, and also learn skills that help us optimize our own well-being in our relationships.
Style: 50% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Field Trips, 10% Web Based. The course is activities-heavy, such that the reading materials will be discussed in depth in class.
Grading: 15% mid exam, 15% final exam, 30% reports/papers, 10% attendance, 10% journal, 20% in-class presentation.
Exam Format: Essay exams that will include some multiple choice questions.

Comm 5211 Critical Media Studies: Theory and Methods
A-F only, 3 credit(s);
Instructor: Vavrus, Mary D
Comm 5441 Communication in Human Organizations
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Comm 5441 Communication in Human Organizations
3 credit(s);
Instructor: Jacobi, Laura Jean
Description: This fully online section is offered though Online and Distance Learning (ODL), College of the Continuing Education. It may be taken for either undergraduate or graduate credit. (Graduate students are advised to register for A-F grading.) Visit "Class URL" for ODL policies, including fee and financial aid information. This course helps students understand the distinct nature of human communication in organizations. Students will learn to recognize the key factors that influence individuals and apply theories of organizational communication. After identifying and using established methods to diagnose issues and problems related to communication, students will develop their own strategies for discovering and explaining organizational and individual interactions.
Style: Online
Grading: See attached syllabus

Comm 5451W Intercultural Communication Processes
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ranachan, Kate
Description: Student may contact the instructor or department for information.

Comm 8110 Seminar: Advanced Speech Problems
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Gross, Alan G
Description: Scientist and scholars are in the same business: we generate, evaluate and communicate knowledge, three activities the internet has transformed. In this seminar, we will explore the internet's impact on these changes, always taking into consideration the very different ways the cultures of the sciences and the humanities interpret these terms. We will investigate web sites as different and as useful as the Protein Data Bank and the William Blake Archive. We will explore the internet's impact on peer review and on scholarly and scientific evaluation after publication. We will also grapple with obstacles to Internet science and scholarship: outmoded tenure and promotion policies, the hurdles in the way of open access, restrictive patent and copyright law, and the decidedly mixed impact of Freedom of Information legislation. For a syllabus, write me agross@umn.edu

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.

Comparative Literature 235 Nicholson Hall

CL 8001 Basic Research Seminar in Comparative Literature I
3 credit(s); Credit will not be granted if credit has been received for: CSDS 8001;
Instructor: Casarino, Cesare
Description: Student may contact the instructor or department for information.

CL 8901 Pedagogy of Cultural Studies and Comparative Literature
3 credit(s);
Instructor: Ganguly, Keya
Description: Student may contact the instructor or department for information.

CL 8910 Advanced Topics in Comparative Literature: Adorno
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Leppert, Richard
Description: The seminar investigates key works of Theodor W. Adorno (1903-1969), Frankfurt School philosopher, sociologist, musicologist, and aesthetician. Readings of major monographs include Dialectic of Enlightenment (co-authored with Max Horkheimer), Minima Moralia: Reflections from Damaged Life, The Psychological Techniques of the Martin Luther
CL 8910 Advanced Topics in Comparative Literature: Science/Scientism in the Humanities
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Brennan, Timothy Andres
Description: This course will question the effects of the "sciences" on the humanities, especially recently, but also historically. We will study the public and media devaluation of the humanities, the deference to the sciences, and the assumption that there is nothing uniquely "scientific" about the humanities themselves. Also, and more significantly, we will explore tendency by humanists (literary critics, artists, philosophers and social theorists) to defer to the claims of science: its evidentiary models, its futurisms, its speculative "materialism." We will be interested as well in counter-trends: the critique of "scientism," for example; resistance to technological or instrumental reason, to a pure productivity without negation, to the death of the subject, and the rhetoric of "being," which is so widespread today. We will discuss the many forms of scientism in the humanities today: "thing" theory, posthumanism, ecocriticism, speculative realism; object-oriented philosophy, the neo-positivism of "distant reading," and the digital humanities. If Julien de la Mettrie in 18th-century France, regarded man as a self-moving machine, the Italian philosopher Gianni Vattimo, calls for "strip[ping] the human sciences of any hermeneutic privilege and assign[ing] the position of chief importance to technoscience, the history of which he equates with Being." Scientism, in short, has a long history. But there is another side of the coin. The sciences are more and more reliant on ideas taken from the humanities without acknowledgement, the "Big Bang," for example; "the God particle." The infiltration of the sciences by the humanities (again, without acknowledgement) can be seen in many of the most celebrated theorists of science in practice: viz, Ian Hacking (Historical Ontology and The Emergence of Probability) and Paul Feyerabend, Against Method. We will assess these trends, explore what is methodologically unique to the humanities, weigh the meaning of the word "materialist," discuss the politics of scientism, and think about the reasons for its current prominence. Readings will be from several genres: novels, criticism, manifestoes. Some possible readings include: Max Horkheimer, Paul Feyerabend, Gilles Deleuze, Ian Hacking, Ludwig Wittgenstein, Bruno Latour, Katherine Hayles, Henri Atlan, Curtis White, Leon Wieseltier, Stanislaw Lem, Carl Popper, Jane Bennett, and others. Requirements: one or two in-class presentations, a mid-term essay prospectus, and a final essay of 15-25 pages.

CL 8910 Advanced Topics in Comparative Literature: Sound and the Visual
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Blocker, Jane M
Description: Student may contact the instructor or department for information.

CL 8910 Advanced Topics in Comparative Literature: Critical Debates in Comparative Literature
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Tageldin, Shaden M
Description: Since their first invocations by Noel and de Laplace in France (1816) and by Goethe in Germany (1827), comparative literature and its corollary, world literature, have defied easy definition: a problem, perhaps, all to the good. In this graduate seminar, we will address ourselves to questions that have vexed the field since its inception. If the act of comparison presupposes both the similarity and dissimilarity of two things, what does it mean to "compare" literatures or to study "comparative" literature? If comparison establishes equivalence between two things only to claim the superiority of one over the other or to mask the inequality of one to the other, what are its ethics of commensurability and incommensurability? How do we liberate--indeed can we liberate--comparative literature from the tautological tyranny of difference and likeness? Our objectives in this seminar will be twofold. The first half of the course will focus on the history of comparative literature and on foundational texts in the field. Taking as our points of departure the work of Bassnett and Melas, we will read early texts in U.S. comparative literature (Shackford, 1876, and Gayley, 1903). We then will look at nineteenth- and early-twentieth-century articulations in France, Egypt, Germany, Britain, Ottoman Palestine, and India: from Goethe on Weltliteratur (1827) to al-Tahtawi and Chasles on comparativity and comparative literature as such (1834, 1835), from de Lomnitz's mobilization of Weltliteratur in defense of "minor" literatures (1877) and Posnett's social Darwinist approach to national and world literatures (1886) to al-Khalidi and Tagore on comparative and world literature (1904, 1907) and Benjamin's translation theory (1923). From these beginnings we will turn to post-WWII incarnations of the field (1942-1970), focusing on Warren, Wellek, Auerbach, Spitzer, Etelemble, and Levin. Finally, we will consider the contemporary field in the Arab world, Africa, China, India, and the West. In the second half of the course, we will examine recent reinterpretations of the meaning, method, and scope of comparative literature now. We will focus on four axes of critical debate: 1) Comparative, world, or planetary literature (Damrosch, Casanova, Hayot, Spivak); 2) Methods of comparison: close vs. distant reading, philology vs. scientism (Moretti, Quayson, Said, Spivak); 3) The translational turn and (post)colonial failures of translatability (Apter, Melas); and 4) The changing status of the "literary" in an increasingly inter-medial discipline. In discussions and in final papers, seminar participants are encouraged to relate their own research to these problems. By semester's end, we will come away with a sharper sense of the history of our field; its periodic reengagement of the relationship of the "literary" to geopolitics, science, and linguistic and economic exchange; and its struggle to replace a Eurocentric worldview with a polycentric vision.

Style: 25% Lecture, 50% Discussion, 25% Student Presentation.
Grading: 60% reports/papers, 20% in-class presentation, 20% class participation. The 60% reports/papers grade shown above includes 10% for a 2-page final paper prospectus and 50% for the 18-20-page final paper itself.

CL 8910 Advanced Topics in Comparative Literature: The Animal
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Brown, Tony C.
Description: Student may contact the instructor or department for information.

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

Comparative Studies in Discourse and Society
235 Nicholson Hall

CSDS 8001 Basic Research 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: Casarino, Cesare
Description: Student may contact the instructor or department for information.

CSDS 8901 Pedagogy of Cultural Studies and Comparative Literature
3 credit(s);
Instructor: Ganguly, Keya
Description: Student may contact the instructor or department for information.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Adorno
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Leppert, Richard
Description: The seminar investigates key works of Theodor W. Adorno (1903-1969), Frankfurt School philosopher, sociologist, musicologist, and aesthetician. Readings of major monographs include Dialectic of Enlightenment (co-authored with Max Horkheimer), Minima Moralia: Reflections from Damaged Life, The Psychological Techniques of the Martin Luther Thomas Radio Address, The Stars Down to Earth, as well as numerous free-standing essays on critical theory, dialectics, mass culture, language and writing, the Adorno-Benjamin aesthetics debates, and music, among others. Key examples of secondary writings on Adorno will be included as well.
Style: 35% Lecture, 65% Discussion.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Science/Scientism in the Humanities
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Brennan, Timothy Andres
Description: This course will question the effects of the "sciences" on the humanities, especially recently, but also historically. We will study the public and media devaluation of the humanities, the deference to the sciences, and the assumption that there is nothing uniquely "scientific" about the humanities themselves. Also, and more significantly, we will explore tendency by humanists (literary critics, artists, philosophers and social theorists) to defer to the claims of science: its evidentiary models, its futurisms, its speculative "materialism." We will be interested as well in counter-trends: the critique of "scientism," for example; resistance to technological or instrumental reason, to a pure productivity without negation, to the death of the subject, and the rhetoric of "being," which is so widespread today. We will discuss the many forms of scientism in the humanities today: "thing" theory, posthumanism, ecocriticism, speculative realism; object-oriented philosophy, the neo-positivism of "distant reading," and the digital humanities. If Julien de la Mettrie in 18th-century France, regarded man as a self-moving machine, the Italian philosopher Gianni Vattimo, calls for "strip[ping] the human sciences of any hermeneutic privilege and assign[ing] the position of chief importance to technoscience, the history of which he equates with Being." Scientism, in short, has a long history. But there is another side of the coin. The sciences are more and more reliant on ideas taken from the humanities without acknowledgement, the "Big Bang," for example; "the God particle." The infiltration of the sciences by the humanities (again, without acknowledgement) can be seen in many of the most celebrated theorists of science in practice: viz, Ian Hacking (Historical Ontology and The Emergence of Probability) and Paul Feyerabend, Against Method. We will assess these trends, explore what is methodologically unique to the humanities, weigh the meaning of the word "materialist," discuss the politics of scientism, and think about the reasons for its current prominence. Readings will be from several genres: novels, criticism, manifestoes. Some possible readings include: Max Horkheimer, Paul Feyerabend, Gilles Deleuze, Ian Hacking, Ludwig Wittgenstein, Bruno Latour, Katherine Hayles, Henri Atlan, Curtis White, Leon Wieseltier, Stanislaw Lem, Carl Popper, Jane Bennett, and others. Requirements: one or two in-class presentations, a mid-term essay prospectus, and a final essay of 15-25 pages.
CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Sound and the Visual
3 credit(s), max credits 24, 8 completions allowed;
**Instructor:** Blocker, Jane M
**Description:** Student may contact the instructor or department for information.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Critical Debates in Comparative Literature
3 credit(s), max credits 24, 8 completions allowed;
**Instructor:** Tageldin, Shaden M
**Description:** Since their first invocations by Noel and de Laplace in France (1816) and by Goethe in Germany (1827), comparative literature and its corollary, world literature, have defied easy definition: a problem, perhaps, all to the good. In this graduate seminar, we will address ourselves to questions that have vexed the field since its inception. If the act of comparison presupposes both the similarity and dissimilarity of two things, what does it mean to "compare" literatures or to study "comparative" literature? If comparison establishes equivalence between two things only to claim the superiority of one over the other or to mask the inequality of one to the other, what are its ethics of commensurability and incommensurability? How do we liberate—indeed can we liberate—comparative literature from the tautological tyranny of difference and likeness? Our objectives in this seminar will be twofold. The first half of the course will focus on the history of comparative literature and on foundational texts in the field. Taking as our points of departure the work of Bassnett and Melas, we will read early texts in U.S. comparative literature (Shackford, 1876, and Gayley, 1903). We then will look at nineteenth- and early-twentieth-century articulations in France, Egypt, Germany, Britain, Ottoman Palestine, and India: from Goethe on Weltliteratur (1827) to al-Tahtawi and Chasles on comparativity and comparative literature as such (1834, 1835), from de Lomnitz's mobilization of Weltliteratur in defense of "minor" literatures (1877) and Posnett's social Darwinist approach to national and world literatures (1886) to al-Khalidi and Tagore on comparative and world literature (1904, 1907) and Benjamin's translation theory (1923). From these beginnings we will turn to post-WWII incarnations of the field (1942-1970), focusing on Warren, Wellek, Auerbach, Spitzer, Etiemble, and Levin. Finally, we will consider the contemporary field in the Arab world, Africa, China, India, and the West. In the second half of the course, we will examine recent reinterpretations of the meaning, method, and scope of comparative literature now. We will focus on four axes of critical debate: 1) Comparative, world, or planetary literature (Damrosch, Casanova, Hayot, Spivak); 2) Methods of comparison: close vs. distant reading, philology vs. scientism (Moretti, Quayson, Said, Spivak); 3) The translational turn and (post)colonial failures of translatability (Apter, Melas); and 4) The changing status of the "literary" in an increasingly intermedial discipline. In discussions and in final papers, seminar participants are encouraged to relate their own research to these problems. By semester's end, we will come away with a sharper sense of the history of our field; its periodic reengagement of the relationship of the "literary" to geopolitics, science, and linguistic and economic exchange; and its struggle to replace a Eurocentric worldview with a polycentric vision.

**Style:** 25% Lecture, 50% Discussion, 25% Student Presentation.

**Grading:** 60% reports/papers, 20% in-class presentation, 20% class participation. The 60% reports/papers grade shown above includes 10% for a 2-page final paper prospectus and 50% for the 18-20-page final paper itself.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: The Animal
3 credit(s), max credits 24, 8 completions allowed;
**Instructor:** Brown, Tony C.
**Description:** Student may contact the instructor or department for information.

CSDS 8910 Advanced Topics in Comparative Studies in Discourse and Society: Weimar Philosophy
3 credit(s), max credits 24, 8 completions allowed;
**Instructor:** Rothe, Matthias
**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:** 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.
CMB 5200 Statistical Genetics and Genomics
A-F only, 4 credit(s);
Instructor: Da,Yang
Description: This course is the first course of a 2-course series on gene discovery and genomic selection using genome-wide SNP markers. The focus of this course is data analysis for gene discovery based on the relationships between phenotypes and DNA markers. This course has six components: 1) preparation in statistics, genomics concepts and population genetics; 2) parametric linkage analysis; 3) nonparametric linkage analysis including linkage disequilibrium analysis; 4) analysis for mapping quantitative trait loci (QTL); 5) analysis of genome-wide association studies; and 6) parentage testing and concepts of genomic prediction and selection.

CMB 5594 Directed Research in Comparative and Molecular Biosciences
1-4 credit(s), max credits 8, 8 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

CMB 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
A-F only, 3 credit(s);
Instructor: Reed,Kent
Description: Student may contact the instructor or department for information.

CMB 8208 Neuropsychopharmacology
A-F only, 3 credit(s);graduate student and instr consent Credit will not be granted if credit has been received for: PSY 8061;
Instructor: Roy,Sabita
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.
CSci 1103 Introduction to Computer Programming in Java
4 credit(s);
Instructor: Dovolis, Chris John
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: Moen, James Bradley
Description: This course will cover algorithm development and the principles of computer programming using C and C++. Topics include introduction to computers and computing, program development, C/C++ programming language syntax, and elementary numerical methods for scientists and engineers. The prerequisite of one semester of calculus indicates the level of mathematical reasoning used in the class.
Style: 50% Lecture, 50% Laboratory.
Grading: 25% mid exam, 25% final exam, 50% problem solving.
Exam Format: problems

CSci 1113 Introduction to C/C++ Programming for Scientists and Engineers
4 credit(s);
Instructor: Baller, Jonathan Thomas
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: Barry, Phillip
Description: This course will cover algorithm development and the principles of computer programming using C and C++. Topics include introduction to computers and computing, program development, C/C++ programming language syntax, and elementary numerical methods for scientists and engineers. The prerequisite of one semester of calculus indicates the level of mathematical reasoning used in the class.
Style: 50% Lecture, 50% Laboratory.
Grading: 25% mid exam, 25% final exam, 50% problem solving.
Exam Format: problems

CSci 1133 Introduction to Computing and Programming Concepts
4 credit(s); Concurrent registration is required (or allowed) in MATH 1271 or Concurrent registration is required (or allowed) in MATH 1371 or Concurrent registration is required (or allowed) in MATH 1571H or instr consent Credit will not be granted if credit has been received for: CSCI 1133H;
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 1133H Honors Introduction to Computing and Programming Concepts
A-F only, 4 credit(s); Concurrent registration is required (or allowed) in MATH 1271 or Concurrent registration is required (or allowed) in MATH 1371 or Concurrent registration is required (or allowed) in MATH 1571H, CSci majors, pre-majors in CSE/CLA, honors student Credit will not be granted if credit has been received for: CSCI 1133;
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

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

CSci 1933 Introduction to Algorithms and Data Structures
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 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: Isler, Volkan Ibrahim
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: Meyer, Gary W
Description: Student may contact the instructor or department for information.

CSci 2041 Advanced Programming Principles
4 credit(s);
Instructor: Van Wyk, Eric
Description: Student may contact the instructor or department for information.

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 3921W Social, Legal, and Ethical Issues in Computing
3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive
Instructor: Barry, Phillip
Description: Computing technology is having profound effects on society, providing many benefits in communication, commerce, science, and medicine. Our increasing reliance on computers has created many challenges, however. The Internet generates concerns about privacy, freedom of speech, and intellectual property rights. We have also seen how the World Wide Web can make us vulnerable to attacks through worms and viruses. This course will consider these topics within a framework of computer ethics.
Style: 60% Lecture, 20% Discussion. In class exercises
Grading: 15% mid exam, 50% reports/papers, 15% special projects, 5% quizzes, 10% class participation, 5% problem solving.
Exam Format: short answer

CSci 3970 Industrial Student Co-op Assignment
S-N only, 2 credit(s), max credits 4;
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 4011 Formal Languages and Automata Theory
4 credit(s);
Instructor: Hopper, Nicholas J
Description: Student may contact the instructor or department for information.

CSci 4041 Algorithms and Data Structures
CSci 4041H Algorithms and Data Structures
A-F only, 4 credit(s); [(1913 or 1933) and 2011, honors student] or instr consent. Cannot be taken for Grad CSci crCREDIT will not be granted if credit has been received for: CSCI 4041;
Instructor: Sturtivant, Carl
Description: Algorithms & Data structures, their implementation, and the analysis of their performance are the subjects of this class. We will examine many well known algorithms that solve important problems efficiently, and also learn something of the art of algorithm design, especially through the paradigms of "divide and conquer", "dynamic programming", and "greedy methods", as well as through adapting existing algorithms and data structures to the task at hand. Performance analysis will be a central feature of the class, both for well known algorithms, and for ones we have newly designed as exercises. Subject areas we cover will include sorting & searching, priority queues, hash tables, binary search trees, disjoint set forests, elementary graph algorithms, minimum spanning trees, single-source shortest paths, all-pairs shortest paths and Huffman coding.
Style: 70% Lecture. Recitation
Grading: 10% mid exam, 35% final exam, 40% problem solving, 15% other evaluation. Programming assignments
Exam Format: Problem-solving

CSci 4061 Introduction to Operating Systems
4 credit(s);
Instructor: STAFF
Description:

CSci 4131 Internet Programming
3 credit(s); 4061, 4211 recommended, cannot be taken for grad CSci crCREDIT will not be granted if credit has been received for: CSCI 5131;
Instructor: 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 crCREDIT 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 crCREDIT 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 4511W Introduction to Artificial Intelligence
4 credit(s); 2011 or instr consent; cannot be taken for grad CSci crCREDIT will not be granted if credit has been received for: CSCI 5511; Meets CLE req of Writing Intensive
Instructor: Larson, Amy Caroline
Description: Student may contact the instructor or department for information.

CSci 4707 Practice of Database Systems
3 credit(s); 4041 or instr consent crCREDIT will not be granted if credit has been received for: CSCI 5707;
Instructor: Mokbel, Mohamed F
Description: Student may contact the instructor or department for information.

CSci 4921 History of Computing
3 credit(s); Credit will not be granted if credit has been received for: HSCI 4321; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Misa, Thomas J
Description: Course examines the question "how do technologies change the world?" through the history of computing. Readings, discussions, and lectures on the people, technologies, ideas, and institutions of modern computing; and the
uses of computers in computation, control, simulation, communication, and recreation. Developments in last 150 years: evolution of hardware and software; growth of computer and semiconductor industries and their relations to other businesses; changing relationships resulting from new data-gathering and analysis techniques; automation; social and ethical issues

CSci 4950 Senior Software Project
A-F only, 3 credit(s), max credits 6;
Instructor: Larson,Amy Caroline
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 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: Nadathur, Gopalan
Description: This course is intended for advanced undergraduates and beginning graduates. A prior exposure to at least a couple of different programming languages and an interest and willingness to think broadly about such languages will be assumed. The focus in this course will be on conceptual issues—such as structure, usability and implementability—that determine programming languages and paradigms. Much of the material will be presented as case studies based on languages like Pascal, C, C++, Java, ML, Haskell and Prolog. Some programming in each of these languages will be necessary, but this will not be an end in itself. The text for this course is "Programming Languages: Concepts and Constructs", 2nd edition, by Ravi Sethi. Details regarding grading and other policies will be accessible prior to the start of the course from the instructor's Web page at http://www.cs.umn.edu/~gopalan.
Style: 90% Lecture, 10% Discussion.
Grading: 25% mid exam, 25% final exam, 50% problem solving.
Exam Format: Problem solving, conceptual
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, educationa 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: Yew, Pen-Chung
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: 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: Boley, Daniel L.
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: Gini, Maria L
Description: Textbooks: Stuart Russell and Peter Norvig, "Artificial Intelligence: A Modern Approach," Prentice-Hall, second edition, 2003 (Chapters 1-11). Paul Graham, "ANSI Common Lisp," Prentice Hall, 1996. Prerequisites: Knowledge of data structures (graphs and trees) and of formal logic (propositional and predicate calculus). Course Objectives: To provide in-depth understanding of the foundations of Artificial Intelligence, with special emphasis on search algorithms and knowledge representation. The course is suitable for students who want to gain a solid technical background in the field and as a preparation for more advanced work in AI. The course is for undergraduate and graduate students. The course will rely in active learning, by using a combination of lectures, in class discussion, and other in class activities. The material from the textbook will be supplemented with some technical papers that will show how to apply the concepts and algorithms to real world problems. For instance, we may look at how airlines search for flights to answer user queries, how search algorithms are used in auctions, how knowledge representation is used to build ontologies and in the semantic web.
Style: 60% Lecture, 20% Discussion, 20% Small Group Activities.
Grading: 15% mid exam, 20% final exam, 15% special projects, 25% written homework, 15% additional semester exams,
10% class participation.

Exam Format: Problem solving

CSci 5521 Introduction to Machine Learning
3 credit(s);
Instructor: Schrater, Paul Robert
Description: Student may contact the instructor or department for information.

CSci 5523 Introduction to Data Mining
3 credit(s);
Instructor: Kumar, Vipin
Description: This course will give a rapid and vigorous introduction to the field of data mining, as well as provide extensive hands-on experience via small data mining projects. Topics include the following: data pre-processing techniques, data types, similarity measures, data visualization/exploration; predictive models (e.g., decision trees, SVM, Bayes, K-nearest neighbors, bagging, boosting) and model evaluation techniques; clustering (hierarchical, partitional, density-based), association analysis; anomaly detection; case studies from areas such as earth science, the Web, network intrusion, and genomics.

CSci 5525 Machine Learning
3 credit(s);
Instructor: Banerjee, Arindam
Description: Student may contact the instructor or department for information.

CSci 5551 Introduction to Intelligent Robotic Systems
3 credit(s);
Instructor: Roumeliotis, Stergios

CSci 5607 Fundamentals of Computer Graphics 1
3 credit(s);
Instructor: Guy, Stephen J
Description: Student may contact the instructor or department for information.

CSci 5609 Visualization
3 credit(s);
Instructor: Keefe, Daniel F
Description: Student may contact the instructor or department for information.

CSci 5707 Principles of Database Systems
3 credit(s); [4041 or instr consent], grad student
Credit will not be granted if credit has been received for: CSCI 4707;
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 5715 From GPS and Virtual Globes to Spatial Computing
3 credit(s);
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: Software Foundations
3 credit(s), max credits 9, 9 completions allowed;
CSci 5980 Special Topics in Computer Science: Topics in Distributed Computing
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Chandra, Abhishek
Description: Student may contact the instructor or department for information.

CSci 5980 Special Topics in Computer Science: Advanced Topics in Computer Architecture
3 credit(s), max credits 9, 9 completions allowed;
Instructor: Zhai, Antonia Bingheng
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: Dovolís, 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: 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.
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.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Nadathur, Gopalan
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Meyer, Gary W
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Van Wyk, Eric
Description: Student may contact the instructor or department for information.

CSci 5991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Terveen, Loren Gilbert
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: Roumeliotis, Stergios
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: Chandra, Abhishek
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: Zhai, Antonia Bingheng
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: Mokbel, Mohamed F
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: Banerjee, Arindam
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: Myers, Chad Leighton
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: Hecht, Brent 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: Keefe, Daniel F
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: Isler, Volkan Ibrahim
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: Knights, Dan
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: 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: McCamant, Stephen A.
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Karypis, George
Description: Student may contact the instructor or department for information.
CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Hopper, Nicholas J
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Zhang, Zhi-Li
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Barry, Phillip
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Konstan, Joseph Andrew
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Boley, Daniel L
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Papanikolopoulos, Nikolaos P
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Janardan, Ravi
Description: Student may contact the instructor or department for information.

CSci 5994 Directed Research
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Saad, Yousef
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Instructor: Tripathi, Anand R
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Instructor: McCamant,Stephen A.
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CSci 5996 Curricular Practical Training
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Carlis,John Vincent
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CSci 5996 Curricular Practical Training
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S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: McCamant, Stephen A.
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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 8760 Plan B Project
S-N only, 3 credit(s);
Instructor: Carlis, John Vincent
Description: Student may contact the instructor or department for information.

CSci 8760 Plan B Project
S-N only, 3 credit(s);
Instructor: Dovolis, Chris John
Description: Student may contact the instructor or department for information.
CSci 8760 Plan B Project
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Instructor: Karypis, George
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CSci 8760 Plan B Project
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CSci 8760 Plan B Project
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CSci 8760 Plan B Project  
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CSci 8970 Computer Science Colloquium  
S-N only, 1 credit(s);  
Instructor: Isler, Volkan Ibrahim  
**Description:** Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science  
3 credit(s), max credits 27, 9 completions allowed;  
Instructor: Interrante, Victoria  
**Description:** Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Wireless Networks & Applications  
3 credit(s), max credits 27, 9 completions allowed;  
Instructor: He, Tian  
**Description:** Student may contact the instructor or department for information.

CSci 8980 Special Advanced Topics in Computer Science: Software Foundations  
3 credit(s), max credits 27, 9 completions allowed;  
Instructor: Nadathur, Gopalan  
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CSci 8980 Special Advanced Topics in Computer Science  
3 credit(s), max credits 27, 9 completions allowed;  
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CSci 8991 Independent Study  
1-3 credit(s), max credits 9, 9 completions allowed;  
Instructor: Carlis, John Vincent  
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Instructor: Myers,Chad Leighton
Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Hecht,Brent J
Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Keefe,Daniel F
Description: Student may contact the instructor or department for information.
CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Isler, Volkan Ibrahim
Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Knights, Dan
Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Guy, Stephen J
Description: Student may contact the instructor or department for information.

CSci 8991 Independent Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: McCamant, Stephen A.
Description: Student may contact the instructor or department for information.

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.

CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Karypis, George
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Jensen, Steve
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Barry, Phillip
Description: Student may contact the instructor or department for information.
CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Janardan, Ravi
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Saad, Yousef
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Sturtivant, Carl
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Kumar, Vipin
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Heimdahl, Mats
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Shekhar, Shashi
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Srivastava, Jaideep
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Interrante, Victoria
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Kuang, Rui
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
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 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: He, Tian
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Nadathur, Gopalan
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Meyer, Gary W
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Van Wyk, Eric
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Terveen, Loren Gilbert
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Roumeliotis, Stergios
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Chandra, Abhishek
Description: Student may contact the instructor or department for information.
CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Zhai, Antonia Bingheng
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Mokbel, Mohamed F
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Banerjee, Arindam
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Myers, Chad Leighton
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Hecht, Brent J
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CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Keefe, Daniel F
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Isler, Volkan Ibrahim
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CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Guy, Stephen J
Description: Student may contact the instructor or department for information.

CSci 8994 Directed Research in Computer Science
1-3 credit(s), max credits 9, 9 completions allowed;
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);
**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:** Online  
**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.

**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 4021 Construction Planning and Scheduling**  
3 credit(s);  
**Instructor:** Styrlund, Kenneth Andre  
**Description:** Project planning, scheduling, and control. Considering/understanding alternatives. Industry techniques. Introduction to critical path method. Using commercial software on personal computers. Updating/analyzing project schedules.

**CMgt 4022 Construction Estimating**  
3 credit(s);  
**Instructor:** Adamson, Mark Richard  
**Description:** Purposes and uses of various kinds of estimates. Techniques for performing quantity take-off, organizing bidding process, requesting and analyzing subcontractor proposals, unit pricing, utilizing published resources, and preparing systems-based estimates. Personal computer programs, spreadsheets, and custom applications to be introduced and used. The linkages between estimates, budgets, cost control systems, and historical cost records will be established.
CMgt 4031 Construction Safety and Loss Control
3 credit(s);
Instructor: Laubach, Ethan A
Description: Student may contact the instructor or department for information.

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.
Style: Online
Grading: See attached syllabus

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, AIA, 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 4213 Facility Operations and Maintenance Intensive
A-F only, 3 credit(s);
Instructor: Fisher, Kristine Kay
Description: Managing operation/maintenance of building systems and facility management department. Operation of mechanical, electrical, and plumbing systems. Critical spaces, fire/life safety systems, utilities. Maintenance for specific building systems. Technology/resources used to support building operations/maintenance.

CMgt 4471 Sustainability for Construction Managers
CMgt 4550 Topics in Construction Management: Building Information Modeling
A-F only, 1 credit(s), max credits 12, 6 completions allowed;
Instructor: Kossila, Heather
Description: A rapidly growing technology, Building Information Modeling (BIM) is the process of using digital models that represent the physical and functional characteristics of a facility. Upon completion of this course, students will have an introductory understanding of BIM concepts as they apply to management throughout the lifecycle of a building or infrastructure project, from planning, design, pre-construction, construction, and operations. Students will use the Revit software application for BIM, developed by Autodesk and available for free download. Topics to be covered include: - Building Information Modeling software and terminology - Evaluating the use of BIM on a specific project - Design development and coordination using BIM - System clash prevention using BIM - Model-based cost estimation - Construction scheduling and optimization - Data collection on existing drawings using BIM and 3D/4D point cloud models - Facility information modeling to support operation and maintenance - BIM contracting issues

CMgt 4550 Topics in Construction Management: The Construction Industry Through Time & Tomorrow
A-F only, 2 credit(s), max credits 12, 6 completions allowed;
Instructor: Bowen, Brian
Description: Student may contact the instructor or department for information.

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.

CMgt 4572 Structural Frames and Building Design/Construction
A-F only, 3 credit(s);
Instructor: Hale, Jupe
Description: Student may contact the instructor or department for information.

Continuing Dental Education 6-406 Moos Tower

CDEd 7303 Postgraduate Contemporary Esthetic Dentistry: Level III--Dental Implants
S-N only, 2 credit(s);
Instructor: Olin, Paul S
Description: Student may contact the instructor or department for information.

CDEd 7306 Postgraduate Contemporary Esthetic Dentistry: Level III--Diagnostic Box
S-N only, 1 credit(s);
Instructor: Olin, Paul S
Description: Student may contact the instructor or department for information.

Cultural Studies and Comparative Literature 235 Nicholson Hall

CSCL 1001 Introduction to Cultural Studies: Rhetoric, Power, Desire
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: Vayo, Isaac
Description: This course will introduce Cultural Studies as a critical, theoretical, interpretive, and interdisciplinary way to come to understand our world and our place in it. You will be working simultaneously in three dimensions: reading culture,
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 credits, meets Lib Ed req of Other Humanities Core; meets Lib Ed 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 credits, meets Lib Ed req of Literature Core; meets Lib Ed req of Writing Intensive

Instructor: STAFF

Description: CSCL 1401W Reading Literature: Theory and Practice 4 credits, meets Lib Ed req of Literature Core; meets Lib Ed req of Writing Intensive Instructor: STAFF Description: This course is meant for people who love reading literature as well as for people who would love to learn how to love reading literature--and it should be lots of fun for both! We will go through the ages--from antiquity to the present day--in search of literature and of its main genres, figures, structures, functions, and themes. We will read of unrequited loves and incestuous desires, of fantastic journeys and monstrous encounters, of power struggles and murderous passions, of passionate friendships and uncanny betrayals, of sexual shame and joyous sex. We will read such things as epic poetry, lyric poetry, plays, novels, parables, and essays.

Style: 100% Lecture.

**CSCL 1401W Reading History: Theory and Practice**

4 credits, meets Lib Ed req of Historical Perspectives; meets Lib Ed req of Writing Intensive

Instructor: STAFF

Description: CSCL 1501W Reading History: Theory and Practice 4 credits, meets Lib Ed req of Historical Perspectives 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 1905 Freshman Seminar: Punk, Hip-hop, and Salsa
A-F only, 3 credit(s);
Instructor: Gallope, Michael
Description: Student may contact the instructor or department for information.

CSCL 1905 Freshman Seminar: American Fiction into Film
A-F only, 3 credit(s);
Instructor: Stoddard, Matthew Donald
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: Ganguly, Keya
Description: This is a course in film criticism and theories of ideology. Our concern will be to gain a critical perspective on
the problem of ideology as it pertains to the cinema (rather than with the ideological content of films per se—though that too
will be addressed). Theorizing issues of cinema and ideology requires that we have a shared understanding of (1) film
form: how the technical apparatus of film functions to produce ideological understandings of the world; (2) film content: how
ideology is inscribed in and through filmic narrative; and (3) film spectatorship: how (and whether) the ways that viewers
are positioned to make sense of themselves and the world have implications for social relations at large (outside the
cinema). Using formal, theoretical and interpretive arguments, we will attempt to formulate readings both of recurrent
ideological themes in the cinema (such as: class conflict; corporate crime; political repression and conspiracy) as well as
develop conceptual arguments about the nature of the cinematic image.

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: Wlodarczyk, Holley Ann
Description: While at first glance it might seem that there's not much that is "interesting" about everyday life, this is where
and how we spend a majority of our lives, and a lens through which we understand some of the most complicated aspects
of our identities, desires, possessions, relationships, and world views. In this course we will examine the rhythms and
rhetoric that structure and define our daily existence, analyzing many of the cultural texts and contexts associated with
everyday life (including but not limited to: bodies, fashion, money, jobs, leisure, transportation, the built environment,
popular media, personal communication, daily routines, etc.). Utilizing diverse theoretical paradigms that contribute to
cultural studies, we will engage the following questions: * How do we express "who" we are in relation to other people in
our daily lives? * How do we decide "where" we will live and work, and what we expect from these places? * How do we
know "when" it's time to work, play, or rest from hour to hour, day to day? * How do we discern between "what" we want or
need to both satisfy and sustain us? * How do we understand "why" the world is the way it is and how we function in it? As
well as undertaking brief comparative studies across time, geography and culture as a class, small groups will contribute to
a semester-long case study to be published and peer-reviewed on our course website. Class Time: 30% Lecture, 40% Discussion, 20% Film/Video, and 10% Group Work. Work Load: 20-40 pages reading per week, 15 pages writing per term, 0 exams, 3 papers, 1 group project, and threaded discussion online.

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: Trapp, Erin Corianne
Description: Student may contact the instructor or department for information.

CSCL 3177 On Television
4 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Labidi, Imed
Description: That the impact of television on our daily life, political views, and social habits is stronger than ever before is perhaps unarguably correct. Television, consumer society, and the culture of commercialism, as Benjamin would argue replaced the real world by representations of the real. Sustained with the rapid reproduction and replication of auditory and visual images, embedded messages, and manipulative advertising strategies, these simulations serve to validate ideas about culture, behavior, gender, race, class, and social interaction, while promoting commercial values. Hence, the purpose of this course is to use a variety of critical approaches to study mass media and address analytical questions such as: who owns the media? Who are the architects behind certain programs? What are their intentions? Has television been transformed into an elitist instrument of hegemony? And how does it manage to shape consciously or subconsciously our beliefs, attitudes, and understanding of abstract concepts such as beauty. Answers to these questions will help us understand how the role of television developed over time. Through the study of different formats of production, theories of spectatorship, and the alliance between television and the state we uncover certain how propagandist ideas are transmitted to legitimize discipline, obedience, and conformity and place them among the highest values in society.

Readings: 50-100 pages Assignments: 3 Essays, 1 presentation, a final 8-page paper

CSCL 3177 On Television
4 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Wlodarczyk, Holley Ann
Description: While early developers and promoters saw TV's democratic and commercial potential, critics were quick to denounce its impractical demands on attention, decrying TV's lack of cultural value compared to art, literature, theater, or even more established mass media like film and radio. While its birth was greeted with varying degrees of skepticism, it has over time survived—and even thrived—despite recent repeated pronouncements of its death. Television—then as now—competes with, contributes to, and depends upon a vast array of media technologies and innovation, industrial and fan practices, programming formats and content. It is neither a simple, discrete object nor a monolithic institution, an instrumental form of social control nor an inconsequential entertainment. In this class, we will engage the complexity of television as a transforming—and transformative—cultural force, one with which we all interact on multiple levels and with varying degrees of collective influence and personal investment. Together, we will critically examine: * trends in television technologies, aesthetics, broadcast standards, and audience expectations * the history of television's cultural texts, as well as their socio-political and economic contexts * the evolution and adaptation of television genres, formats, marketing strategies, and fan bases * the impact of television on various cultural institutions and ideologies, and vice versa. As we explore the growing academic fields of television and media studies—drawing upon many theoretical tools and insights developed in film and cultural studies—we will consider several questions, including: * How has TV affected our understanding of concepts like "public" and "private" over time? * What role does TV technology play in the development of local, national and global communities? * Does representation of cultural diversity on TV contribute to greater social equality off screen? * To what extent is "reality" mediated by TV production techniques and (con)textual manipulation? * Are viewers merely passive consumers of TV products or active participants in TV culture? Also, together we will analyze our own constantly changing roles in relation to television and media culture more broadly—as viewers, producers, fans, critics, and, of course, as scholars.

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: Mathiason, Jessica Lee
Description: Student may contact the instructor or department for information.

CSCL 3321W Theories of Culture
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
In this course, we will investigate the various (and nefarious) ways in which past and present Western cultures have codified the human body into socially-constructed, politically-loaded categories that work to both defer and delimit opportunities for and access to power. A history of philosophies of the body will provide a foundation for these inquiries, while sociological, semiotic, and critical theories will help us understand the complex relationships between our perceptions and presentations of the body, and the concrete, habituated ways we come to "embody" them. Over the course of fifteen weeks, we will: [1] study visual and textual representations and discourses of the body - historical and contemporary; [2] examine and theorize historical processes,

**CSCL 3361 Visions of Nature: The Natural World and Political Thought**

3 credit(s);Meets CLE req of Environment

**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.

**CSCL 3456W Sexuality and Culture**

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

**Description:** In CSCL 3456W-003, or SEXUALITY AND CULTURE, we will study, discuss, explore, and analyze the history, politics, implications, effects, and metamorphoses of the slippery term "sexuality," and how this term operates in all of our lives. We will read texts by michel foucault and sigmund freud, excerpts from the documentary novel, RANDOM FAMILY: LOVE, DRUGS,TROUBLE AND COMING OF AGE IN THE BRONX, and articles from Lee Edelman, Margaret Talbot, Susan Faludi, and others. We will also view various television and film clips, and we will screen the film, LILJA 4-EVER. CSCL 3456W-003 is both an active course and a writing intensive one: to this end we will take part in group presentations throughout the term, write and revise four short essays, and engage in writing workshops and exercises.

**Prerequisites for 3456W-003 include a willingness to participate and engage in daily class activities and conversations, and an openness to new ideas. You will receive a group e-mail post by January 13th that will list course materials and directions to article access.**

**CSCL 3456W Sexuality and Culture**

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

**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:** McGillicuddy,Brendan John O'Shea

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

**CSCL 3458 The Body and the Politics of Representation**

3 credit(s);Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive

**Instructor:** Hubbard,Kysa Koerner

**Description:** How do bodies mean? Fat. Thin. Rich. Poor. Can we trace - at least in part - the (Western) historical trajectory of these meanings? Body. Soul. Truth. Error. In what representational forms have these ascriptions been made manifest over culture and time in the West, and how do they continue to shape and inform the ways in which we are bodies and the ways in which we perceive/interpret/understand/regulate them? As feminist philosopher Susan Bordo writes, "The body is not merely flesh and bone, but a surface of inscription, a locus of control, a malleable, intelligible embodiment of material culture and ideology"(1993). Following this, how do issues of gender, race, sexuality, and class figure in here? Can representations of the body ever be innocent? Good. Evil. Dirty. Clean. In this course, we will investigate the various (and nefarious) ways in which past and present Western cultures have codified the human body into socially-constructed, politically-loaded categories that work to both defer and delimit opportunities for and access to power. A history of philosophies of the body will provide a foundation for these inquiries, while sociological, semiotic, and critical theories will help us understand the complex relationships between our perceptions and presentations of the body, and the concrete, habituated ways we come to "embody" them. Over the course of fifteen weeks, we will: [1] study visual and textual representations and discourses of the body - historical and contemporary; [2] examine and theorize historical processes,
materials, ideological and economic structures and systems that have gone into the (re)making of disciplined, "civilized," "habitualized" bodies; [3] explore philosophical and theoretical concepts that have shaped past and present thinking about the body itself, as well as in representation and practice; [4] engage issues of gender, race, sexuality and class as they have historically intersected and continue to intersect with ideas about and the regulation of marginalized bodies and their representation.

**Style:** 40% Lecture, 20% Film/Video, 30% Discussion, 10% Small Group Activities.

**Grading:** 60% reports/papers, 10% quizzes, 10% attendance, 20% reflection paper.

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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:** Trapp, Erin Corianne

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

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**CSCL 3461 Monsters, Robots, Cyborgs**

3 credit(s); Meets CLE req of Literature

**Instructor:** Gill, Meredith Morgan

**Description:** The figure of the monster has a long history of representing our fears and desires in a world always in flux. This course examines questions that monsters, robots, and cyborgs allow us to pose about social norms, relations of production and reproduction, binaries between the natural and unnatural, and links between humans and machines. By examining a variety of philosophical, scholarly, literary, filmic and historical texts, we will attempt to place the pre-modern, modern, and postmodern figure of the monster in its philosophical and historical context to understand what monsters tell us about ourselves and our tolerance for difference.

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

**Grading:** 20% mid exam, 20% final exam, 60% reports/papers.

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**CSCL 3465 Aliens**

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

**Instructor:** Hadley, Matthew James

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

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**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

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**CSCL 3993 Directed Study**

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

**Instructor:** Ganguly, Keya

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

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**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.

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**CSCL 3993 Directed Study**

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

**Instructor:** Leppert, Richard

**Description:** Student may contact the instructor or department for information.
CSCL 3993 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Brennan, Timothy Andres
Description: Student may contact the instructor or department for information.

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

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

CSCL 3993 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Pepper, Thomas Adam
Description: Student may contact the instructor or department for information.

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

CSCL 3993 Directed Study
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Tageldin, Shaden M
Description: Student may contact the instructor or department for information.

CSCL 4993 Directed Study
A-F only, 1-3 credit(s), max credits 6;
Instructor: Lekas, Michelle Yvonne
Description: Student may contact the instructor or department for information.

CSCL 4993 Directed Study
A-F only, 1-3 credit(s), max credits 6;
Instructor: Vayo, Isaac
Description: Student may contact the instructor or department for information.

CSCL 5331 Discourse of the Novel
3 credit(s); Credit will not be granted if credit has been received for: CL 5331;
Instructor: Pepper, Thomas Adam
Description: "A novel is a prose narrative of some length that has something wrong with it" (Randall Jarrell). This course investigates the largely modern form known as the novel from the point of view of its ability to incorporate other forms, including epistle, lyric, and dramatic dialogue, into what F.W. Schlegel calls "progressive universal poetry." Here the concern is to approach the novel from oblique angles -- there is no standard novel -- and to try to use whatever types of analysis are available for this unnatural, monstrous "genre." Undergraduates planning to enroll in the course should have had some training in literary theory, for example in 3000 or 5000-level courses on close reading, reading literary movements, basic concepts of literary study, or semiotics. Readings will include works by Sterne, F.W. Schlegel, Stendhal, Kleist, Goethe, Kierkegaard, George Eliot, Flaubert, Henry James, Kafka, Woolf, Beckett, Lispector, as well as criticism by Benjamin, Lukacs, Shklovsky, Erich Auerbach, de Rougement, Barthes, Louis Marin, Genette, Banfield, and others.
Style: 50% Lecture, 50% Discussion.
Grading: 70% reports/papers, 30% class participation.

CSCL 5501 Origins of Cultural Studies
3 credit(s);
Instructor: Hudecova, Eva Ruth
Description: Cultural studies is not simply the study of culture. Thus, a course on the "Origins of Cultural Studies" cannot simply be a course on culture, or any one of the disciplines, methods, and questions associated with its study: history,
philosophy, sociology, ethnography, literature, feminism, postcolonialism, critical race studies, the role of the intellectual, mass media, or the problem of academic disciplinarity. Rather, such a course has to cover all of these areas, and more specifically, the intersections and crosspollinations of these various areas of study that provided the space and need for the discipline of Cultural Studies. A discipline that came to be in part because it was highly suspicious of the conventions of disciplinarity, cultural studies combines the methodologies of several disciplines, including, importantly, literary theory and criticism. As an area, it made the study of popular, low-brow, and middle-brow works worthy of critical attention and respect. In its approach, cultural studies is both interdisciplinary and anti-disciplinary, thus producing generalists, i.e., experts whose approach to knowledge resists the capitalist system?s insistence on narrow specialization. This course aims to provide students with an understanding of the multifaceted origins, influences, and effects of cultural studies via a series of close readings and discussions of some of the discipline?s most influential thinkers. Students will receive 3 credits upon completing the course.

CSCL 5666 Film Music: Theory, History, Practice
A-F only, 4 credit(s);
Instructor: Leppert, Richard
Description: This course considers the role of music in film from silent cinema in the early twentieth century to the near present, with particular emphasis on Hollywood, including narrative features, shorts, documentary, horror, thriller, science fiction, comedy, and cartoon. Broadly speaking, the course investigates the principal functions, practices, impacts and semiotics of music specific to various film genres across time. It will focus on theory, history, affect, and effect, addressing questions about film music as a social and cultural practice, including its role as part of broad political economy within the context of the culture industry. Although the syllabus is arranged in approximate chronological order of film history, the course is organized topically and is intended less as an historical survey and more as a critical investigation into the development and use of music central to the sound-image relation.
Style: 25% Lecture, 40% Film/Video, 25% Discussion, 5% Student Presentation, 5% Web Based.
Grading: Blogs count 25%, class presentation 25%, paper 40%, class participation 10%

CSCL 5910 Topics in Cultural Studies and Comparative Literature: Authors and Their Critics
3-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Brennan, Timothy Andres
Description: There are a number of examples in literary criticism in which a critic gets so deeply into an author that the result is a collaboration, and the work of art and the art of criticism are mutually displayed in a reading of each. At times a critic, in other words, interpreting a novel or poem, composes a work that rivals its object. The critical work may even be longer, or have taken more time to write, than the work of art itself. How often do we study this relationship? What can we learn about the art of literary criticism by examining in depth, and at length, the original work of art alongside its critical response, often itself a tour de force? The idea is to explore the art of criticism at its limits, pairing single works with single works of criticism of single works. I am drawn to those cases where critics have written long and involved books, not just on single authors, but on a single work by one author. To pore over them alongside the work itself is to learn the art of criticism and fiction at once. A possible reading list pairings includes Pierre Bourdieu's The Rules of Art and Gustave Flaubert's Sentimental Education; Roberto Schwarz's Master on the Periphery of Capitalism and Machado de Assis, The Posthumous Memoirs of Bras Cubas; Walter Ben Michaels’ The Gold Standard and the Logic of Naturalism and Theodore Dreiser's Sister Carrie; Fredric Jameson's Brecht and Method and Bertolt Brecht's The Caucasian Chalk Circle; Barbara Herrnstein Smith's Contingencies of Value and a selection of Shakespeare's sonnets; Jean Franco's The Dialectics of Poetry and Silence and Cesar Vallejo, Poemas Humanos. Requirements: One short theme essay, and a final essay of 15-20 pages.

CSCL 5993 Directed Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Ganguly, Keya
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: Brown Jr, Robert L
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: Leppert, Richard
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: Brennan, Timothy Andres
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: Casarino, Cesare
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: Gallope, Michael
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.

CSCL 5993 Directed Study
1-3 credit(s), max credits 9, 9 completions allowed;
Instructor: Tageldin, Shaden M
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: Rothe, Matthias
Description: Student may contact the instructor or department for information.

Curriculum and Instruction 145 Peik Hall

CI 1001 Introduction to the Elementary School
A-F only, 3 credit(s);
Instructor: LoBello, Jana
Description: Student may contact the instructor or department for information.

CI 1001 Introduction to the Elementary School
A-F only, 3 credit(s);
Instructor: Dyke, Erin Lee
Description: Student may contact the instructor or department for information.

CI 1001 Introduction to the Elementary School
A-F only, 3 credit(s);
Instructor: Rombalski, Abigail Arleen
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:** 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:** Isaacson, Kris
**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 3212 Practicum: Elementary Teaching
S-N only, 2 credit(s);
Instructor: Byrn, Katherine Margaret
Description: Student may contact the instructor or department for information.

CI 3283 Practicum: Special Education K-6
S-N only, 2 credit(s);
Instructor: Byrn, Katherine Margaret
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: Midkiff, Emily 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: Laster, Lori A
Description: Student may contact the instructor or department for information.

CI 3610 Linguistics for Teachers
A-F only, 3 credit(s); Meets CLE req of Social Sciences
Instructor: Vanek, Jenifer Baker
Description: Student may contact the instructor or department for information.

CI 3611W Basics in Teaching English as a Second Language
OPT No Aud, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Vanek, Jenifer Baker
Description: CI 3611W is a four-credit writing intensive course that combines a service learning internship of 30 hours with classroom lectures, discussions, group work, writing assignments and experiential activities to introduce students to theoretical and conceptual foundations of language pedagogy and prepares students for teaching ESL (English as a second language) to students (primarily adults) in varied classroom contexts. The course is writing intensive and also requires students to actively participate in discussions around both teaching and writing, reflect on their internship experiences, and produce written reports and oral presentations that demonstrate their developing understanding of core issues in the field of Teaching English to Speakers of Other Languages (TESL).

CI 3611W Basics in Teaching English as a Second Language
OPT No Aud, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Schwedhelm, Maria C
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: Smith, Garett Kay
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: Bloodworth, Rosalind Deirdre
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: Li, Yichen
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: Gyendina, Mariya L
Description: Student may contact the instructor or department for information.

CI 4122 Social Class Education and Pedagogy
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Coffee, Angela Christine
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: Kennedy, Jolie
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: Feyissa, Solen Desalegn
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: Koivula, Matti Juhani
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: Isaacson, Kris
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: Boeckers, Daryl Robert
Description: Student may contact the instructor or department for information.

CI 4312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CI 2312; Meets CLE req of Technology and Society
Instructor: Lin, Jing-Huey
Description: Student may contact the instructor or department for information.

CI 4312 Sex, Drugs, and the Internet: Educational Perspectives
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CI 2312; Meets CLE req of Technology and Society
Instructor: Hutchinson PhD, Jim
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: Maloney Leaf, Betsy
Description: Student may contact the instructor or department for information.

CI 5075 The Social and Historical Foundations of Art Education
A-F only, 1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Gamble, Shelagh Jean
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 5212 Elementary Education Content and Pedagogy II
A-F only, 3 credit(s);
Instructor: Wyberg, Terrence R
Description: Student may contact the instructor or department for information.

CI 5285 Clinical Experience in Elementary School Teaching
S-N only, 12 credit(s), max credits 24;
Instructor: Byrn, Katherine Margaret
Description: Student may contact the instructor or department for information.

CI 5286 Student Teaching Seminar: Elementary Education
A-F only, 3 credit(s), max credits 6;
Instructor: Robbins, Lois M
Description: Student may contact the instructor or department for information.

CI 5287 Capstone Project: Improvement of Teaching in Elementary and Pre-Kindergarten Schools
A-F 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
A-F only, 3 credit(s);
Instructor: Reilly, Christiane
Description: Instructional uses of computers and representative business, education, and marketing applications, including word processing, databases, spreadsheets, and graphic design.

CI 5301 Foundations of Computer Applications for Business and Education
A-F only, 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 5301 Foundations of Computer Applications for Business and Education
A-F only, 3 credit(s);
Instructor: Ouyang, Fan
CI 5301 Foundations of Computer Applications for Business and Education
A-F only, 3 credit(s);
Instructor: Fang, Fei
Description: Student may contact the instructor or department for information.

CI 5325 Designing and Developing Online Distance Learning
A-F only, 3 credit(s);
Instructor: 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: McGill, Chuck
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: This course, commonly referred to as “The Apps Class,” focuses on the design and development of interactive learning materials. Throughout the course, students work together on designs and short development tasks culminating in a functional iPhone/iPad app. Discussion topics include interaction design, usability, utility, aesthetics, emotional design, and contemporary issues in software design and development.

CI 5410 Special Topics in the Teaching of Literacy
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Lensmire, Timothy J.
Description: This course explores the politics of literacy and race in classrooms (with politics understood both as how power plays out and in relation to creating democratic forms of life in schools). Theoretical and historical resources are developed first. Bakhtin's writings on language?including his concepts of utterance, speech genre, and heteroglossia?help us explore the social life of language and literacy as they get used in different contexts by different people. Then, we take up two writers who characterize the racial situation in the US in different (but complementary) ways. Historian Matthew Jacobson helps us understand the historical fabrication, changeability, and contingencies of whiteness, with an eye to the power relations and social havoc it has generated; and the Reverend Thandeka, drawing on psychoanalytic theory and history, supports our examination of the racial identities created by our society and how these identities often undermine...
action that might improve our racial situation. With these beginnings, the course shifts to the close exploration of the workings of literacy and race in schools. We examine talk about race in educational settings and the larger educational community, and find that while it is often muted (as in Mica Pollock’s ethnographic study), it also always has the potential of exploding into loud controversy (as in the debate over Ebonics, chronicled by Theresa Perry and Lisa Delpit). And we examine the work and lives of teachers and students in schools, with the help of Bob Fecho’s writing on his attempts to teach English in progressive ways and Daniel Yon’s research with youth as they create identities in ‘global times.’ Finally, we complicate and revise our emerging ideas one last time, as we work with texts and films chosen by members of the class. As educators, scholars, and citizens, we have responsibilities to participate intelligently and critically in conversations about school and society?especially as school and society continue to privilege some at the expense of others. The main goal and method of this course is to bring our own ideas about education, race, and literacy into dialogue with the ideas of others?other members of the class, as well as various researchers and writers. In this process, we will revise and better articulate our images of and commitments to a worthy education for all of our children and fellow citizens.

CI 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 5414 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 5425 Reading Instruction in the Elementary Grades
A-F only, 3 credit(s);
Instructor: Bergeson,Kristi Tamte
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 5435 Instructional Leadership in Preventing Reading Difficulties
A-F only, 3 credit(s);
Instructor: Helman, Lori A
Style: 30% Lecture, 30% Discussion, 15% Small Group Activities, 15% Demonstration, 10% Web Based.
Grading: 15% final exam, 10% reports/papers, 75% special projects. Tutoring of a struggling reader required.

CI 5441 Teaching Literature in the Secondary School
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Crampton, Anne Elizabeth
Description: Student may contact the instructor or department for information.

CI 5442 Literature for Adolescents
A-F only, 3 credit(s);
Instructor: Oziewicz, Marek Cezary
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: McDonald Van Deventer, Megan Elizabeth
Description: Student may contact the instructor or department for information.

CI 5474 New Literacies Frameworks and Instruction: Digital Texts and Digital Reading
A-F only, 3 credit(s);
Instructor: O’Brien, David
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: Davis, Marshall Lee
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: Jung, Karl Gerhard
Description: Student may contact the instructor or department for information.

CI 5512 Secondary Science Methods: Understanding the Nature of Science
A-F only, 3 credit(s);
Instructor: Ellingson, Charlene L
Description: Student may contact the instructor or department for information.

CI 5531 Teaching Middle School Science
A-F only, 3 credit(s);
Instructor: Billington, Barbara Lynne
Description: The central themes of the course are: 1) Promoting inquiry, research, and reflection; 2) Honoring the diversity of our communities and learners; and 3) Fostering a commitment to lifelong learning and professional development. The purpose of this course is to examine science teaching in the middle school and help you inquire and reflect about your own teaching practice and its impact on you and your students. Throughout this course we will collaboratively inquire about teaching and learning, observe and analyze instruction, and reflect on your own and each others’ science teaching. Ultimately this course is designed to not only support you during the practicum experience, but also help you learn how to use various instructional techniques and methods, and to inquire and reflect upon your teaching during this semester and beyond.

CI 5536 Equity, Policy, and Assessment in Science Education
A-F only, 3 credit(s);
Instructor: Brown, Julie C.
Description: Student may contact the instructor or department for information.
CI 5539 Improving Secondary Science Instruction: Surviving the First Two Years
A-F only, 3 credit(s);
Instructor: Ellis, Joshua Alexander
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: Hovan, Scot Alan
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 5612 ESL Methods for Multilingual Development
A-F only, 3 credit(s);
Instructor: Stolpestad, Amy O'Connor
Description: Student may contact the instructor or department for information.

CI 5619 Teaching World Languages and Cultures in Elementary Settings
3 credit(s);
Instructor: Owen-Lyons, Stephanie
Description: Student may contact the instructor or department for information.

CI 5628 Analyzing Learner Language in Second Language Acquisition
OPT No Aud, 3 credit(s);
Instructor: Tarone, Elaine E
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, Karla
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: Stolpestad, Amy O'Connor
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: Clyne, Sarah
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: Bauer, Rebecca Lee
Description: Student may contact the instructor or department for information.

CI 5646 English Grammar for ESL Teachers
3 credit(s);
Instructor: Ranney, Susan Elaine
### CI 5651 Foundations of Second Languages and Cultures Education
- **A-F only, 3 credit(s);**
- **Instructor:** Bigelow, Martha
- **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 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:** Bigelow, Martha
- **Description:** The course provides a background to inquiry in the areas of second/foreign language reading and writing. Participants are given a wide range of options to choose from to meet their own professional and intellectual interests. This project encourages lifelong learning by starting students on the path to continuing to deepen their understanding of the second/foreign language literacy and of current pedagogical approaches to the teaching of literacy across many second language classroom settings. This course explicitly addresses, through critical pedagogical approaches, how culture and community-specific literacies can find their way into language curricula in order to facilitate both first language maintenance and second language acquisition.

### CI 5658 Foreign Language Testing and Assessment
- **A-F only, 3 credit(s);**
- **Instructor:** Bigelow, Martha
- **Description:** Student may contact the instructor or department for information.

### CI 5660 Special Topics in the Teaching of Second Languages and Cultures
- **1-3 credit(s), max credits 12, 12 completions allowed;**
- **Instructor:** Montgomery, Mary Lynn
- **Description:** Student may contact the instructor or department for information.

### CI 5672 Language-Focused Instructional Practices and Strategies for Dual Language/Immersion Classrooms
- **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: Owen-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: Israelson, Madeleine Sarah Heins
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: Leitl, Tracy Michiel
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: Clark, Chris
Description: Student may contact the instructor or department for information.

CI 5745 Engaging Youth With Social Studies Texts
A-F only, 3 credit(s);
Instructor: Avery, Patricia Grant
Description: Student may contact the instructor or department for information.

CI 5812 Teaching Algebra
A-F only, 3 credit(s);
Instructor: Pettis, Christy 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: Cramer, Kathleen Ann
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 5980 Clinical Experiences for K-12 Teaching
A-F only, 1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Henning-Smith, Jeff
Description: Student may contact the instructor or department for information.

CI 5982 Enacting Equity-Based Pedagogy
A-F only, 2 credit(s);
Instructor: Coffino, Kara
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: Roehrig, Gillian Heather  
Description: Student may contact the instructor or department for information.

CI 8145 Using Mixed Methods in Educational Research  
A-F only, 3 credit(s);  
Instructor: O'Brien, David  
Description: Student may contact the instructor or department for information.

CI 8146 Critical Ethnography in Education  
A-F only, 3 credit(s);  
Instructor: Ngo, Bic  
Description: Student may contact the instructor or department for information.

CI 8147 Critical Discourse Analysis in Educational Research  
A-F only, 3 credit(s);  
Instructor: Dockter Tierney, Jessica  
Description: Student may contact the instructor or department for information.

CI 8148 Conducting Qualitative Studies in Educational Contexts  
3 credit(s);  
Instructor: Majors, Yolanda  
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 8151 Paradigms and Practices in Teacher Preparation  
A-F only, 3 credit(s);  
Instructor: Sato, Mistilina  
Description: Student may contact the instructor or department for information.

CI 8154 Culturally Relevant Pedagogy  
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
The Culture and Teaching (CaT) colloquium explores historical, interdisciplinary, and cross-cultural perspectives on the concept of social justice, particularly as it relates to education. As usual, the entire CaT faculty will be part of the team directing this seminar. I am the course organizer this year, and I will try to fold a few education-related talks by presenters in C & I's Diversity Dialogues project into our class discussions, too. As you know, the concept of social justice (along with complimentary concepts such as inequality, inequity, and disparity) is often mobilized by political progressives. Indeed the CaT program in Curriculum and Instruction is partially defined by its commitment to social justice. The concept is usually understood to mean something like fairness in the art of governing. That includes, among other things, 'the fair and compassionate distribution of the fruits of economic growth so that people are enabled to lead fulfilling lives and be active contributors to their community, (United Nations Report, 2010). In this usage, the concept of social justice is implicitly linked to larger questions about the constitution of citizenship and especially human rights. As you also know, however, others have re-deployed the concept of social justice in a counter-vernacular in which social justice more narrowly means something akin to anti-capitalist, ?socialist, and freedom-destroying. To get us situated, in our first few class sessions I will discuss the history of the concept as well as its expanding uses, suggesting that this tension between the promises and impasses of social justice, the hopes and disappointments of those who mobilize under its sign, and its linguistic and social uses and political recuperations is an important topic for doctoral students to think through before they make or as they are making ongoing assessments about the place of social justice in relation to their teaching, research, and writing.

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: Vagle, Mark D
Description: Student may contact the instructor or department for information.

CI 8391 Learning Technologies Seminar
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Scharber, Cassandra
Description: Student may contact the instructor or department for information.

CI 8395 Directed Study: Learning Technologies
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Doering, Aaron H
Description: Student may contact the instructor or department for information.

CI 8400 Special Topics in Children's and Young Adult Literature
3 credit(s), max credits 6, 6 completions allowed;
Instructor: Oziewicz, Marek Cezary
Description: Student may contact the instructor or department for information.

CI 8573 Nature of Inquiry in STEM Education
A-F only, 3 credit(s);
Instructor: Wang, Hui Hui
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 8650 Seminar: Special Topics in Second Languages and Cultures Research
CI 8691 Readings in Second Languages and Cultures Education
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Tedick PhD, Diane J
Description: 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: Fortune PhD, Tara Williams
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.

Dakota
19 Scott Hall

Dakota 1121 Beginning Dakota I
5 credit(s); Credit will not be granted if credit has been received for: DAKO 4121;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

Dakota 3123 Intermediate Dakota I
5 credit(s); Credit will not be granted if credit has been received for: DAKO 4123;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

Dakota 3125 Introduction to Dakota Linguistics
3 credit(s);
Instructor: McKay, Neil Troy
Description: Student may contact the instructor or department for information.

Dakota 4121 Beginning Dakota I
3 credit(s); Credit will not be granted if credit has been received for: DAKO 1121;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

Dakota 4123 Intermediate Dakota I
3 credit(s); Credit will not be granted if credit has been received for: DAKO 3123;
Instructor: Bendickson, Wayne Joseph
Description: Student may contact the instructor or department for information.

Dakota 5126 Advanced Dakota Language I
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: McKay, Neil Troy
Description: Student may contact the instructor or department for information.

Dance
Barbara Barker Center for Dance
Dnce 1001 Modern Dance Technique 1
1 credit(s);
Instructor: Plauche Flink, Emilie
Description: Student may contact the instructor or department for information.

Dnce 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.

Dnce 1010 Modern Dance Technique 3
1-2 credit(s), max credits 4;
Instructor: Virtucio, Laura Anne Selle
Description: Student may contact the instructor or department for information.

Dnce 1010 Modern Dance Technique 3
1-2 credit(s), max credits 4;
Instructor: Thompson, Erin D
Description: Student may contact the instructor or department for information.

Dnce 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: DuCane,Andrea Jackson
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 1331 Yoga
1 credit(s);
Instructor: Tutt,Andrea Dawn
Description: Student may contact the instructor or department for information.

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: Noer, Jason Richard
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: McClusky, Whitney
Description: Student may contact the instructor or department for information.

Dnce 1401 Introduction to Dance
OPT No Aud, 3 credit(s); Credit will not be granted if credit has been received for: CHIC 1401; Meets CLE req of Arts/Humanities
Instructor: 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: Wilder, Arwen P
Description: Student may contact the instructor or department for information.

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 3010 Modern Dance Technique 5**  
2 credit(s), max credits 4;  
**Instructor:** Smith, Joan Anne  
**Description:** Student may contact the instructor or department for information.

**Dnce 3010 Modern Dance Technique 5**  
2 credit(s), max credits 4;  
**Instructor:** Rink, Scott  
**Description:** Student may contact the instructor or department for information.

**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
Dnce 3311 Contemporary Indian Dance 1
OPT No Aud, 1 credit(s);
Instructor: Vairavan, Chitra
Description: Student may contact the instructor or department for information.

Dnce 3334 Introduction to Dance/Movement Therapy
2 credit(s);
Instructor: Nordstrom-Loeb, Barbara E
Description: Student may contact the instructor or department for information.

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 how 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 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% Demonstration, 5% Field Trips, 5% Guest Speakers. field trip=watching performance
Grading: 10% mid exam, 15% final exam, 10% reports/papers, 5% special projects, 5% quizzes, 5% written homework, 20% attendance, 5% journal, 15% in-class presentation, 10% class participation. A-F
Exam Format: Questionnaire and a short essay, a final paper

Dnce 3602 Dance Composition 2
3 credit(s);
Instructor: Smith, Joan Anne
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.

Dnce 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 one’s self and other art forms will also be discussed and implemented through assignments in movement and writing.

Dnce 3602 Dance Composition 2
3 credit(s);
Instructor: Rink, Scott
Description: Student may contact the instructor or department for information.

Dnce 3901 Survival Strategies in Dance
A-F only, 3 credit(s);
Instructor: Rink, Scott
Description: Student may contact the instructor or department for information.

Dnce 4602 Dance Composition 4
3 credit(s);
Instructor: Smith, Joan Anne
Description: This course is the fifth of a six-semester sequence in dance composition. Class work will consist of exploration and structure of dances for groups. Course Objectives include: developing an understanding and appreciation for the craft of group choreography, exploring the creative process, discovering movement vocabulary, and acquiring skills of compositional structures for groups. Successful completion of Composition 3 or departmental approval required for registration.

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 Anne
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 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 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 5500 Topics in Dance: Modern 9
A-F only, 2 credit(s), max credits 10, 10 completions allowed;
Instructor: Thompson, Erin D
Description: These are the ninth and tenth courses in the Dance Program’s ten-section sequence of modern dance technique. It focuses on pre-professional modern dance technique training for students prepared for that level of achievement. 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. The specific dance forms taught in the course vary based on background of the listed instructor. Successful completion of previous level or departmental approval
Dnce 5500 Topics in Dance: Modern 9
A-F only, 2 credit(s), max credits 10, 10 completions allowed;
Instructor: Rink, Scott
Description: These are the ninth and tenth courses in the Dance Program's ten-section sequence of modern dance technique. It focuses on pre-professional modern dance technique training for students prepared for that level of achievement. 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. The specific dance forms taught in the course vary based on background of the listed instructor. Successful completion of previous level or departmental approval by audition required for registration.

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 5993 Directed Studies
1-4 credit(s), max credits 10, 10 completions allowed;
Instructor: Larasati, Rachmi Diyah
Description: Student may contact the instructor or department for information.

Dental Hygiene  9-406 Malcolm Moos Health Sciences Tower

DH 2111 Dental Anatomy
A-F only, 2 credit(s);
Instructor: Anderson, Jeanne Marie
Description: All deciduous and permanent teeth, including tooth form, function, and relationship to oral health; calcification, eruption, and exfoliation patterns; ideal static occlusion, dental terminology, and tooth annotation systems. Lab includes identification and annotation of teeth and restoration, in wax, of portions of a typodont tooth. Includes content necessary for the practice of dental hygiene. Teaching methods include lecture, large and small group discussion, and laboratory assignments in drawing, carving, and annotating teeth. Textbooks: Woelfel and Scheid, "Dental Anatomy, Its Relevance to Dentistry." Williams and Wilkens Publisher; Dental Anatomy Study Guide. Course only open to students enrolled in the Program in Dental Hygiene.
Style: 40% Lecture, 10% Discussion, 50% Laboratory.
Exam Format: multiple choice

DH 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 3227 Oral and Maxillofacial Radiology Clinic II
A-F only, 0 credit(s);
Instructor: STAFF
Description: This course introduces exposing patient radiographs, interpretation, panoramic and extraoral technique, and quality assurance procedures.
DH 4310 Foundations of Interprofessional, Professionalism, Communication, and Collaboration
A-F only, 1 credit(s);
Instructor: Ephrem, Hlwit
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 78, 6 completions allowed;
Instructor: Blue, Christine M
Description: Student may contact the instructor or department for information.

DH 4310 Foundations of Interprofessional, Professionalism, Communication, and Collaboration
A-F only, 1 credit(s);
Instructor: Flynn, Priscilla Moen
Description: Student may contact the instructor or department for information.

COURSE OBJECTIVES

1. Biologic 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.
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, 3 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: Flynn, Priscilla Moen  
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.

**DH 5409 Dental Hygiene Clinic Administration**  
A-F only, 2 credit(s);  
Instructor: Ahmann, Lisa Webb  
Description: Student may contact the instructor or department for information.

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### Dental Therapy

**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 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 5000 Dental Therapy Capstone Project**  
S-N only, 0-1 credit(s), max credits 1, 1 completion allowed;  
Instructor: Self, Karl D
DT 5140 Preventive Pediatric Dental Clinic
A-F only, 1 credit(s);
Instructor: Yesil,Jasmine
Description: Student may contact the instructor or department for information.

DT 5141 Clinical Pediatric Dentistry III
A-F only, 2 credit(s);
Instructor: Conlin DDS,Robert E.
Description: In addition, the course introduces advanced imaging modalities as used in dentistry. The topics include: cone beam computed tomography, computed tomography, MRI, nuclear medicine and use of contrast media. 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 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. Periodic quizzes, class exercises, and three exams will be given.

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. 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 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 5434 Operative Dentistry II 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. 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.

DT 5435 Operative Dentistry II for the Dental Therapist, Lab
A-F only, 1 credit(s);
Instructor: Lee, Ignatius Kaiyan
Description: Student may contact the instructor or department for information.

DT 5443 Operative Clinic III
A-F only, 4 credit(s);
Instructor: Hildebrandt, Gary Howard
Description: Student may contact the instructor or department for information.

DT 5460 Essentials of Clinical Care I For the Dental Therapist
S-N only, 1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Riggs, Sheila
Description: Student may contact the instructor or department for information.

DT 5471 Prosthodontic Topics for Dental Therapy
S-N only, 2 credit(s);
Instructor: 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.

DT 6162 Principles of Exodontia and Minor Oral Surgery
A-F only, 1 credit(s);
Instructor: Self, Karl D
Description: Student may contact the instructor or department for information.

DT 6321 Treatment Planning
A-F only, 2 credit(s);
Instructor: Nadeau, Richard D
Description: Student may contact the instructor or department for information.

DT 6340 Advanced Dental Therapy Prep Clinic
A-F only, 10 credit(s);
Instructor: Self, Karl D
Description: Student may contact the instructor or department for information.

DT 6341 Advanced Dental Therapy Prep Lecture
A-F only, 2 credit(s);
Instructor: Self, Karl D
Description: Student may contact the instructor or department for information.

Dentistry

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: Schiffman DDS,MS,Eric L  
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: Moana Filho DDS,MS,Estephan Jose  
Description: Student may contact the instructor or department for information.

Design 240 McNeal Hall

Des 1101V Honors: Introduction to Design Thinking  
A-F only, 4 credit(s);Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive  
Instructor: Hemmis,Patricia  
Description: Course Description: Students in DES 1101v (honors) will explore, through lecture and hands-on projects, the many ways that design thinking has become a powerful force in the 21st century. On the one hand, design methods and processes are seen as an important means of tackling complex social and cultural problems. On the other hand, designers stimulate desire and need through their manipulation of the form and function of places and objects. Designers are asked to re-think and re-shape processes as well as products. Design production has expanded to include the design of interactions, communications services, and collaborations. Design thinking is a crucial means of fostering creativity and innovation when employed as a problem-solving tool in such fields as business or medical practice. More than ever, designers are called upon to place human needs at the center of their design engagement. As a result, design thinking has become a powerful tool to address issues such as sustainability and social justice, at both a macro and micro level.  
Audience: This course is intended for undergraduate students who are interested in learning how design thinking and design processes can be used as a catalyst for exploration, innovation and research. Rationale: This course exposes students to many facets of design thinking and provides them with an interdisciplinary perspective about design and human behavior. DES 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% Discussion, 25% Student Presentation, 10% Guest Speakers. Students complete and present to hands-on group projects on design topics. Students work on projects in class, although outside time is also necessary.  
Grading: 40% reports/papers, 25% special projects, 30% quizzes, 5% reflection paper.  
Exam Format: Tests 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: 50% Lecture, 15% Film/Video, 25% Small Group Activities, 10% Guest Speakers. Students complete and present two hands-on group projects on design topics. Students work on projects in recitation periods, although outside time is also necessary.  
Grading: 30% reports/papers, 30% special projects, 35% quizzes, 5% reflection paper.  
Exam Format: Exams are composed of short answer, essay, and fill in the blank. Exams require students to identify and apply course concepts  

Des 1111 Creative Problem Solving  
S-N only, 3 credit(s);  
Instructor: Hokanson, Brad  
Description: This course will be taught using a <b><font color="red">fully online</font></b> format with one in-person class meeting on campus during Fall Semester [date TBD]. Students will have opportunities to connect online with learners from around the globe, who are also focused on creative problem solving. The course involves in-person and online activities. New enrollment will not be allowed after September 9. Students from all areas of study are encouraged to enroll in the class. For more information, see <a href= "http://creativity.design.umn.edu" target="new">http://creativity.design.umn.edu</a><br> 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. 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://hokanson.design.umn.edu/creativity/CreativeClassFPV-very-large.mov" target="new">Video of class activities</a>.<br>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. 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.  

Des 1111H Honors: Creative Problem Solving  
A-F only, 3 credit(s);  
Instructor: Hokanson, Brad  
Description: Student may contact the instructor or department for information.  

Des 1202 Discovering Majors and Careers  
A-F only, 1 credit(s);  
Instructor: Dillon, Tara C  
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: The desire to succeed and do well can sometimes circumvent one's willingness to embrace challenge in order to safely achieve an outcome (not fail). This FRESHMAN SEMINAR aims to break down barriers and fears while developing processes toward new ways of seeing. It builds and expands connections to a larger world of ideas and disciplines. Through weekly exercises in visual 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 in ideation and process and to build a way of communicating in a visual manner. This seminar is for individuals interested in expanding personal ways of seeing, thinking and doing, individuals interested in developing a personal process in the evolution of ideas. It includes: lectures, student-led discussions, demonstrations, classroom activities, field trips and homework. Various media will be used to build a visual journal. While drawing will be a component, students need not be skilled, just willing.

Des 1905 Freshman Seminar: Homelessness: What it is and why we should care
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Bruin, Marilyn J
Description: The seminar provides opportunities for students to explore the complex causes and consequences of homelessness. In this seminar, the focus is on families and youth experiencing homelessness. Through readings, engagement, discussion, and written reflections students will understand and develop empathy for children, youth, and parents experiencing the continuum of homelessness from street life, temporary shelters, and transitional and supportive housing. By critically examining research literature, collecting and analyzing interview data from homeless youth and housing providers, and site visits, students will develop and evaluate their own innovative proposals to solve homelessness. If approved, the course will be submitted for designation as a service-learning course.

Des 1905 Freshman Seminar: My Twin Cities: Urban Design and Public Space
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Bauknight, Paul D.
Description: A significant element in a new student's university experience is the experience of a new city or metropolitan area. Similarly, designers understand the challenges and opportunities of design first through their own personal experiences. This freshman seminar will use exploration of the metropolitan area to introduce ideas of design, planning, and community. One of the most effective learning environments for Kindergarten in Denmark is the "Forest Kindergarten". In brief, it's a bus that takes students out to the woods every day. This is a metaphor for this class, one which directly uses the city to understand planning and design, and one which simultaneously introduces students to their new environment. A series of explorations of the city will be the central focus of this freshman seminar. The course will alternate in classroom lectures and discussions with explorations in the field. Students will undertake a series of investigations as to how public and urban space is used. As all students have ready, inexpensive access to a monthly bus pass, this gives them access all over the Twin Cities area. The theoretical underpinnings begin with William H. Whyte's work on observing public spaces, and connects with the current work of Jan Gael and Paco Underhill on the use and design of public spaces. It addresses history, urban design, architecture, culture and cultures, public transit and more. The course would use the city itself as a beginning of understanding of design.

Des 1910W Freshman Seminar: Printing for Designers
A-F only, 2 credit(s); Meets CLE req of Writing Intensive
Instructor: Boyd Brent, James W
Description: In this freshman seminar we will look at how designers print, and why they might chose one particular method of printing rather than another, and what the effect of this choice on their creativity might be. The main theme of the course is that the printing process affects design production. The how component will be addressed mainly by actually making prints in the creative production part of the course; the why component will be addressed mainly by researching aspects of printing?and this part will also include writing. The creative production part of the course will center on hands-on screenprinting in the Surface Design Studio in McNeal Hall, and will also include monoprinting, letterpress printing, relief printing, and digital printing. A variety of printing surfaces will be used, including paper and fabric. The research component will focus on how designers reproduce ideas in print, and will include looking at how contemporary printing technologies are changing, and the effect these changes are having on creative production in the design world, and will also include a brief overview of the history of printing.

Des 2101 Design and Visual Presentation
A-F only, 3 credit(s);
Instructor: Fogg, Monica
Description: 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
Des 3131 User Experience in Design
A-F only, 4 credit(s);
Instructor: STAFF
Description: The experiential components (emotional quality, affect, and lingering impression) of a design form the core of what is commonly referred to as the "user experience." In order to design for an optimal user experience, designers must first understand the guiding principles and process of interaction design. In addition, they must be competent in prototyping, conducting evaluations, and presenting their findings. This class will address the UX design process and these tools in the contexts of designed objects, interfaces, and environments. Students will apply what they learn to existing designs, conceive and propose prototype redesigns, and evaluate the effectiveness of their prototypes in a variety of design case studies.
Style: 20% Lecture, 25% Discussion, 35% Small Group Activities, 20% Guest Speakers. Small group work includes presentation and critique of projects
Grading: 50% special projects, 20% in-class presentation, 10% class participation. 20% in-class activities

Des 3201 Career and Internship Preparation for Design
A-F only, 1 credit(s);
Instructor: 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: 25% Lecture, 15% Film/Video, 20% Discussion, 25% Small Group Activities, 15% Guest Speakers.
Grading: 54% reports/papers, 37% special projects, 5% attendance, 4% class participation.

Des 3201 Career and Internship Preparation for Design
A-F only, 1 credit(s);
Instructor: Nagle, Heather
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: Bartley, Christine Giefer
Description: Student may contact the instructor or department for information.

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 the nature of new high-tech materials that make these cultures especially important to our current writing system. Also in phase 2 we'll discuss the manuscript tradition in Europe taking us through 1400 A.D. Phase 3 will focus on the emergence of movable type in Europe and the rapid dissemination of the printed word. With this information revolution we'll examine how standards of learning, notions of beauty and the black plague all combined to make for a period unparalleled in social and intellectual upheaval. We'll conclude with the industrial revolution and its effect on printing and mass production.
Style: 30% Lecture, 10% Discussion, 20% Laboratory, 20% Demonstration, 20% Field Trips.
Grading: 75% special projects, 10% written homework, 5% reflection paper, 5% class participation, 5% problem solving.

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?thus, 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 guest 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 ergonomics and the end-user solution history and culture Technology & Craft: workmanship material & structure quality-cost-schedule ratio markets & distribution A Non-Doctrinaire Appreciation of the... Decorative Conceptual Designed Crafted Found & Ad Hoc Engineered 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 Neuhart & 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.
Style: 20% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Field Trips, 10% Guest Speakers, 10% Service Learning.
Grading: 20% reports/papers, 60% special projects, 5% attendance, 10% reflection paper, 5% class participation.

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 in the United States
Instructor: Hadjiyanni, Tasoulla
Description: This course meets the Liberal Education Theme ? Diversity and Social Justice in the United States? and is open to both graduate and undergraduate students from both design and non-design related fields. As a result, the term 'design' in this course is used broadly and it can mean anything from web site design to the design of interior environments and curricula for K-12 education. Drawing from interdisciplinary literature and the experiences of local immigrant groups, the course begins by unraveling the notions of culture and identity and how they relate to globalization. Each subsequent week is devoted to exploring how cultural facets, like architecture, interior design, the natural environment, gender, art, food, dance, dress, language, and religion manifest themselves and their relationship to design. The class's primary requirement is a team design project that responds to a problem identified. Students research a group of their choice and through that experience, develop a project that addresses a need in that community.
Style: 10% Lecture, 50% Discussion, 20% Student Presentation, 5% Field Trips, 15% Guest Speakers.

Des 4193 Directed Study in Design
A-F only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Harder, Kathleen A.
Description: Student may contact the instructor or department for information.

Des 5165 Design and Globalization
A-F only, 3 credit(s); Grad student credit will not be granted if credit already received for: DHA 4165/DHA 5165; Credit will not be granted if credit has been received for: DES 4165;
Instructor: Hadjiyanni, Tasoulla
Description: This course meets the Liberal Education Theme ? Diversity and Social Justice in the United States? and is open to both graduate and undergraduate students from both design and non-design related fields. As a result, the term 'design' in this course is used broadly and it can mean anything from web site design to the design of interior environments and curricula for K-12 education. Drawing from interdisciplinary literature and the experiences of local immigrant groups, the course begins by unraveling the notions of culture and identity and how they relate to globalization. Each subsequent week is devoted to exploring how cultural facets, like architecture, interior design, the natural environment, gender, art, food, dance, dress, language, and religion manifest themselves and their relationship to design. The class's primary requirement is a team design project that responds to a problem identified. Students research a group of their choice and through that experience, develop a project that addresses a need in that community.
Style: 10% Lecture, 50% Discussion, 20% Student Presentation, 5% Field Trips, 15% Guest Speakers.

Des 5193 Directed Study in Design
A-F only, 1-6 credit(s), max credits 36, 6 completions allowed;
Instructor: Hokanson, Brad
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.

Des 8113 Teaching and Assessment
A-F only, 2 credit(s);
Instructor: Chu, Sauman
Des 8114 Design Studio
A-F only, 4 credit(s);
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

Des 8115 Grant Writing
A-F only, 2 credit(s);
Instructor: Bruin, Marilyn J
Description: Student may contact the instructor or department for information.

Des 8166 Material Culture and Design
A-F only, 3 credit(s);
Instructor: DeLong, Marilyn R
Description: Student may contact the instructor or department for information.

Development Studies and Social Change  537 Heller Hall

DSSC 8111 Approaches to Knowledge and Truth: Ways of Knowing in Development Studies and Social Change
S-N only, 2 credit(s);
Instructor: Skaria, Ajay
Description: Student may contact the instructor or department for information.

DSSC 8211 Doctoral Research Workshop in Development Studies and Social Change
S-N only, 2 credit(s);
Instructor: Brown, Karen
Description: Student may contact the instructor or department for information.

DSSC 8212 Doctoral Research Workshop in Development Studies and Social Change
S-N only, 1 credit(s);
Instructor: Brown, Karen
Description: Student may contact the instructor or department for information.

DSSC 8310 Topics in Development Studies and Social Change
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Witz, Leslie
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: <html> <p>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. </p> <p>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. </p> </html>
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
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
- Orthodontics and space maintenance
- Minor Pediatric oral lesions
- Common emergencies for children and adolescents
- Pediatric and adolescent problem solving and treatment planning

**Grading:** 100% other evaluation. Grading is based on clinical competencies, attendance, supplemental learning activities, and examinations.

**DDS 6171 Orthodontics I**

A-F only, 2.7 credit(s);
Instructor: Beyer, John Paul

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

**DDS 6181 Orthodontic Clinic Rotation**

S-N only, 0.2 credit(s);
Instructor: De Felippe, Nanci Lara

Description: 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

**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. Grading is based on 4 examinations throughout the semester.

**DDS 6214 General Histology**

A-F only, 3.7 credit(s);
Instructor: Krafts MD, Kristine Pauline

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

**DDS 6231 Physical Evaluation I**

A-F only, 2.9 credit(s);
Instructor: Rhodus, Nelson L

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

**DDS 6234 Radiographic Interpretation**

A-F only, 2 credit(s);
Instructor: Conlin DDS, Robert E

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 6234 Radiographic Interpretation
A-F only, 2 credit(s);
Instructor: Ahmad, Mansur
Description: <html> <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> </html>
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>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>
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: Schiffman DDS, MS, Eric L
Description: Student may contact the instructor or department for information.

DDS 6337 Current Legal Issues for the New Dentist
S-N only, 2.1 credit(s);
Instructor: Ryan, Mary-Lynn L
Description: <html> <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>
Grading: 100% other evaluation. 75% of the grade will be based on class projects, 25% of the grade will be based on online assessments.

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>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> </html>
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, Conradro
Description: <html> <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."</p> </html>
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
<p>Description: <html> <p>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.</p> </html></p>

**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:** <html> <p>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.</p> </html>

**DDS 6436 Operative Dentistry II**

- **A-F only, 2.1 credit(s);**
- **Instructor:** Phair,Craig B
- **Description:** <html> <p>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.</p> </html>

**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:** <html> <p>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.</p> </html>

**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: dental caries - the disease and its symptoms, the non-invasive and minimally invasive treatment approach, modern composites, pain of dentin origin, digital restorative dentistry using Cad/Cam smile analysis, bleaching, porcelain veneers. 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
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.

Grading: 100% other evaluation.

**DDS 6476 Preclinical Prosthodontic Technique Laboratory IV, Complete Dentures**
- A-F only, 2.3 credit(s);
- Instructor: Cook, Gary Eugene

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.

Grading: 100% other evaluation.

**DDS 6496 Predoctoral Prosthodontic Honors Course**
- S-N only, 1.3 credit(s);
- Instructor: Conrad, Heather Joan

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

Student may contact the instructor or department for information.

**DDS 6601 Phillips Neighborhood Elective Volunteer Experience**
- No Grade, 0 credit(s), 5 completions allowed;
- Instructor: Quick, Karin

Student may contact the instructor or department for information.

**DDS 6602 Harbor Lights Elective Volunteer Experience**
- No Grade, 0 credit(s), 4 completions allowed;
- Instructor: Quick, Karin

Student may contact the instructor or department for information.

**DDS 6603 Elective Regional Volunteer Experience**
- S-N only, 0 credit(s);
- Instructor: Quick, Karin

Student may contact the instructor or department for information.

**DDS 6604 Elective Regional Volunteer Experience**
- S-N only, 0 credit(s);
- Instructor: Johnson, Sara N

Student may contact the instructor or department for information.

**DDS 6605 Advanced Practice Management Elective**
- S-N only, 0-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Murphy, Michael David

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

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

Student may contact the instructor or department for information.
DDS 6610 Elective Externship III
S-N only, 1-5 credit(s), max credits 15, 3 completions 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 Study Abroad Externship
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 Union Gospel Mission 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 6901 Essentials of Clinical Care DDS2
S-N only, 0 credit(s);
Instructor: Thierer DDS, Todd E
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: <html> <p>Students receive instruction and direction in the application of knowledge, skills, and the principles of care to the comprehensive assessment, diagnosis, treatment planning, treatment, and management of patients. In addition, students are presented with the concepts and principles of Evidence Based Dentistry as applied to the clinical practice of dentistry. </p> </html>

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: <html> <p>Students receive instruction and direction in the application of knowledge, skills, and the principles of care to the comprehensive assessment, diagnosis, treatment planning, treatment, and management of patients. In addition, students are presented with the concepts and principles of Evidence Based Dentistry as applied to the clinical practice of dentistry. </p> </html>

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, Jennieke A
Description: Why study Dutch? How is it that the Dutch-speaking world has had such an enormous impact on global business, the politics of health care, environmental policy, international law, the fine arts and architecture? How did the Dutch become a model for the political, social, and economic revolutions that shaped our contemporary world? 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. 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. Study Dutch and find out what is so unique about the Dutch. Dutch language study is intensive but very rewarding: You'll be reading Dutch easily and speaking confidently by the end of your studies. Most importantly you will gain insight into the worldly and creative Dutch spirit and open your mind to new possibilities for building a useful international dimension into your education. Ample opportunities exist for continuing and perfecting your Dutch through further study in the Netherlands or Dutch-speaking Belgium. The Department of German, Scandinavian and Dutch welcomes you to Dutch 1001 this fall!
Style: 20% Lecture, 20% Discussion, 40% Laboratory, 10% 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.
Exam Format: quizzes, tests

Dtch 1003 Intermediate Dutch
5 credit(s); 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 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, Jennieke A
Description: Why study Dutch? How is it that the Dutch-speaking world has had such an enormous impact on global business, the politics of health care, environmental policy, international law, the fine arts and architecture? How did the Dutch become a model for the political, social, and economic revolutions that shaped our contemporary world? 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. 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. Study Dutch and find out what is so unique about the Dutch. Dutch language study is intensive but very rewarding: You'll be reading Dutch easily and speaking confidently by the end of your studies. Most importantly you will gain insight into the worldly and creative Dutch spirit and open your mind to new possibilities for building a useful international dimension into your education. Ample opportunities exist for continuing and perfecting your Dutch through further study in the Netherlands or Dutch-speaking Belgium.
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, 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 5993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Guided individual reading or study. The student approaches an appropriate professor with a topic of interest, and if the professor has time and is willing to guide the student, the student, along with the professor, fills out a form which is available in the department office (205 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

Early Modern Studies 1030 Heller Hall

EMS 5500 Topics in Early Modern Studies: Baroque Rome: Art and Politics in the Papal Capita
3 credit(s), max credits 6;
Instructor: Ostrow, Steven F
Description: Student may contact the instructor or department for information.

EMS 5500 Topics in Early Modern Studies: Style and Power: Art of Italian Renaissance Courts
3 credit(s), max credits 6;
Instructor: Bartoli, Roberta
Description: Student may contact the instructor or department for information.

EMS 8100 Workshop in Early Modern Studies
S-N only, 1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Shank, JB
EMS 8250 Seminar in Early Modern Studies: Colonial Cultures and Identities in Latin America
3 credit(s), max credits 6;
Instructor: Chambers, Sarah C
Description: Student may contact the instructor or department for information.

EMS 8500 Topics in Early Modern Studies: The Event of the Anthropocene
3 credit(s), max credits 6;
Instructor: Braun, Bruce Philip
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, 2012 (NOTE 4th EDITION ONLY!!) ISBN: 978-0-393-93518-9 (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: 65% mid exam, 35% laboratory evaluation. The two best scores of 3 mid-term exams are used in combination with the 4th exam
Exam Format: Exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc.

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: Teyssier, Christian
Description: INSTRUCTOR: Christian Teyssier Email: teyssier@umn.edu OFFICE HOURS: Thursdays, 11:15AM -12:05PM or by appointment; take advantage of Email to formulate your questions. I will also create a Ning-like site so we
can chat at pre-determined times. ALL QUESTIONS REGARDING THE LAB: Kent Kirkby, kirkby@umn.edu Course description EARTH AND ITS ENVIRONMENTS is a course on our planet's dynamic systems. These systems involve internal processes that control core and mantle convection and drive the motion of tectonic plates, creating the most spectacular mountains and canyons accompanied by dramatic seismic and volcanic activity. In addition, external processes control the evolution of glaciers, streams, groundwater, oceans, and atmospheric circulations. The new challenges in the Earth sciences are to understand the rock record in the context of these governing forces, and to resolve the spatial and temporal relationships between external and internal processes. We will also examine the records of global climate change and evaluate the impact of these changes on the environment and life on Earth: what do we know and/or speculate about our future and that of our planet? Course materials Lecture Text: Geology by Chernicoff and Whitney (4th Edition) Used and new copies are available at the bookstore in Coffman Union.

**Style:** 40% Lecture, 10% Film/Video, 20% Discussion, 30% Laboratory.

**Grading:** 65% quizzes, 35% laboratory evaluation.

**ESci 1001 Earth and Its Environments**
- **Credit:** 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:** Toraman, Erkan
- **Description:** Student may contact the instructor or department for information.

**ESci 1006 Oceanography**
- **Credit:** 4 credit(s); Credit will not be granted if credit has been received for: GEO 5006; Meets CLE req of Environment; meets CLE req of Physical Sciences
- **Instructor:** Seyfried Jr, William E
- **Description:** Welcome to Oceanography! Although the oceans surround us, in many ways they remain more mysterious than the surface of the Moon. The world oceans include the deepest places and the largest mountains on earth, a dynamic and ever-changing pattern of waves, tides, and currents, and an array of unfamiliar creatures that live in a three-dimensional solution of life-sustaining chemical nutrients. In the short space of a semester, this course will try to provide at least a flavor of this complex and fascinating part of our world. We start with the nature of the ocean basins: their physical structure and evolution. We then examine the linkage between the evolution of the Earth and the formation of the oceans, and explore why and how seawater is what it is. Recently discovered spectacular geysers of hot seawater issuing from vents on the ocean floor, not only help to regulate seawater chemistry, but provide a unique environment for unusual microbial species, which serve as the base of the food chain for a diverse community of organisms. Next, we consider the dynamics of the great water masses, currents like the Gulf Stream, and the waves and tides that directly affect the lives of people on and near the sea. We then examine biological production and decomposition of organic matter and how they control nutrient distributions. The course ends with a look at how oceans and climate have evolved over time and where we may be headed in the future. Throughout the course, we emphasize ways in which the oceans directly affect humankind. Some examples include ocean-atmosphere interactions, which account for the El Niño phenomenon that has such a profound affect on global weather patterns and the human condition on Earth; tsunamis, which can influence people's lives in virtually all coastal communities; coastal storms and the effects they produce; and the oceans and global warming. We also work on questions of marine policy, fishing, and marine mineral resources from the perspectives of human impacts.
- **Style:** 55% Lecture, 40% Laboratory, 5% Small Group Activities.
- **Grading:** 25% final exam, 42% quizzes, 33% laboratory evaluation.

**ESci 1007 From Microbes to Mammoths: History of Life on Earth**
- **Credit:** 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**
ESci 1101 Introduction to Geology

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

Mid-term exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc.

Exam Format: Mid-term exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc.

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, 2012 (NOTE 4th EDITION ONLY!!) ISBN: 978-0-393-93518-9
Style: 80% Lecture, 10% Film/Video, 10% Discussion.
Grading: 100% mid exam. The two best scores of 3 mid-term exams are used in combination with the 4th exam
Exam Format: Mid-term exams have a mixed format including short essays, drawing diagrams, multiple choice questions, fill in the blank, matching, etc.

Instructor: Christian Teyssier Email: teyssier@umn.edu OFFICE HOURS: Thursdays, 11:15AM -12:05PM or by appointment; take advantage of Email to formulate your questions. I will also create a Ning-like site so we can chat at pre-determined times. ALL QUESTIONS REGARDING THE LAB: Kent Kirkby, kirkby@umn.edu Course description EARTH AND ITS ENVIRONMENTS is a course on our planet's dynamic systems. These systems involve internal processes that control core and mantle convection and drive the motion of tectonic plates, creating the most spectacular mountains and canyons accompanied by dramatic seismic and volcanic activity. In addition, external processes control the evolution of glaciers, streams, groundwater, oceans, and atmospheric circulations. The new challenges in the Earth sciences are to understand the rock record in the context of these governing forces, and to resolve the spatial and temporal relationships between external and internal processes. We will also examine the records of global climate change and evaluate the impact of these changes on the environment and life on Earth: what do we know and/or speculate about our future and that of our planet? Course materials Lecture Text: Geology by Chernicoff and Whitney (4th Edition) Used and new copies are available at the bookstore in Coffman Union.
Style: 40% Lecture, 10% Film/Video, 20% Discussion, 30% Laboratory.
Grading: 65% quizzes, 35% laboratory evaluation.
ESci 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: Toraman, Erkan
Description: Student may contact the instructor or department for information.

ESci 1106 Oceanography
3 credit(s); Credit will not be granted if credit has been received for: ESCI 1006; Meets CLE req of Environment
Instructor: Seyfried Jr, William E
Description: Welcome to Oceanography! Although the oceans surround us, in many ways they remain more mysterious than the surface of the Moon. The world oceans include the deepest places and the largest mountains on earth, a dynamic and ever-changing pattern of waves, tides, and currents, and an array of unfamiliar creatures that live in a three-dimensional solution of life-sustaining chemical nutrients. In the short space of a semester, this course will try to provide at least a flavor of this complex and fascinating part of our world. We start with the nature of the ocean basins: their physical structure and evolution. We then examine the linkage between the evolution of the Earth and the formation of the oceans, and explore why and how seawater is what it is. Recently discovered spectacular geysers of hot seawater issuing from vents on the ocean floor, not only help to regulate seawater chemistry, but provide a unique environment for unusual microbial species, which serve as the base of the food chain for a diverse community of organisms. Next, we consider the dynamics of the great water masses, currents like the Gulf Stream, and the waves and tides that directly affect the lives of people on and near the sea. We then examine biological production and decomposition of organic matter and how they control nutrient distributions. The course ends with a look at how oceans and climate have evolved over time and where we may be headed in the future. Throughout the course, we emphasize ways in which the oceans directly affect humankind. Some examples include ocean-atmosphere interactions, which account for the El Niño phenomenon that has such a profound affect on global weather patterns and the human condition on Earth; tsunamis, which can influence people's lives in virtually all coastal communities; coastal storms and the effects they produce; and the oceans and global warming. We also work on questions of marine policy, fishing, and marine mineral resources from the perspectives of human impacts.
Style: 55% Lecture, 40% Laboratory, 5% Small Group Activities.
Grading: 25% final exam, 42% quizzes, 33% laboratory evaluation.

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: Fayon, Annia
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: Whitney, Donna L
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 13, 2014 will examine the water resources of our rivers and lakes, and a second full-day trip on Saturday, September 27, 2014 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 1901 Freshman Seminar
A-F only, 2 credit(s), max credits 6;
Instructor: Yuen, David A
Description: Student may contact the instructor or department for information.

ESci 2201 Solid Earth Dynamics
A-F only, 4 credit(s);
Instructor: Moskowitz, Bruce Matthew
Description: Student may contact the instructor or department for information.
ESci 2301 Mineralogy
3 credit(s);
Instructor: Feinberg, Joshua M.
Description: Student may contact the instructor or department for information.

ESci 3004 Water and Society
3 credit(s);
Instructor: Ito, Emi
Description: Student may contact the instructor or department for information.

ESci 3093 Problems in Earth Sciences: Junior
1-4 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Students interested in working on a particular problem or issue in either geology or geophysics can contact the department office for referral to appropriate faculty members. Students will work on a one-to-one basis with a faculty member. Projects may include literature review, laboratory or field work, or computer modeling. Depending on the 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 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 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 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: Kohlstedt,David L
Description: Student may contact the instructor or department for information.

ESci 4402 Biogeochemical Cycles in the Ocean
3 credit(s);[CHEM 1021, CHEM 1022] or instr consent Credit will not be granted if credit has been received for: ESCI 8402;
Instructor: Matsumoto,Katsumi
Description: Welcome to Biogeochemical Cycles in the Ocean! In recent decades, oceans have absorbed roughly 30% of the CO2 emitted to the atmosphere by human activities. This capacity will diminish in the future, as the CO2-buffering capacity is eroded and the oceans become more acidic. Nevertheless, the sheer size of the ocean carbon reservoir means that the oceans will remain the ultimate sink for much of anthropogenic CO2 in the coming centuries. Oceans not only play a key role in controlling atmospheric CO2 today, but also were critical in global carbon cycling throughout Earth's history. This course will examine the ocean carbon cycle and its more important controlling processes, such as ocean circulation (physics), primary production and degradation of organic matter (biology), CO2 acid-base reactions (chemistry), and continental weathering and marine sedimentation (geology). The course begins with an examination of ocean physics, including Ekman dynamics, western boundary current, gyre circulation, stratification, intermediate- and deep-water formation, and global thermohaline circulation. Observations of tracers will be used to illustrate theoretical discussion. We will then consider marine biology, such as mechanisms of seasonal bloom, dependence of surface ocean production on nutrients and temperature, and the export of organic matter to the deep ocean. Satellite images and measurements of oxygen, phosphorus, and nitrogen will be used to illustrate these processes and elucidate the spatial and temporal patterns of primary production. The class will examine CO2 chemistry in seawater and air-sea gas exchange, including concepts of solubility and chemical and isotopic equilibrium concentrations. "Bomb" radiocarbon, produced by thermonuclear bomb testing in the 1950-1960s, will be used to constrain the global rate of air-sea gas exchange. To gain a geological perspective, we also consider how long term processes, such as weathering of continental silicate rocks and carbonate sedimentation, help control atmospheric CO2 levels. With this cumulative understanding, the course will conclude by addressing global issues, such as the fate of fossil fuel CO2, glacial-interglacial atmospheric CO2 variations. Interdisciplinary in design, the course will strive for a quantitative description of ocean biogeochemistry, using observations whenever possible to illustrate basic processes and concepts.
Style: 80% Lecture, 20% Discussion.
Grading: 30% final exam, 60% written homework, 10% class participation.
ESci 4501 Structural Geology
3 credit(s);
Instructor: Hudleston, Peter John
Description: Structural geology is the study of the structures formed in rocks as a result of deformation, on all scales from the microscopic to the crustal or lithospheric (plates), and on time scales that vary from rapid - associated with brittle behavior - to extremely slow - associated with ductile flow. The most important forces applied to crustal rocks are gravitational and tectonic, and they result in rocks everywhere being in a state of stress. Analysis of structures starts with the concepts of stress and strain, with an emphasis on the large permanent strains commonly developed in nature. The course deals with the geological implications of strain theory and the geometry, kinematics and mechanical processes involved in the development of tectonic fabric and structures, moving from the brittle to the ductile regimes. Deformation mechanisms on the grain and microscopic scales are considered. Structures analyzed include joints, faults and folds
Grading: 37% mid exam, 12% final exam, 10% reports/papers, 40% laboratory evaluation. 3 midterms plus lecture final for lecture part of course. 30% for lab work plus 10% for a lab final. Field trip reports 10%.
Exam Format: Short essay answers, plus some problems involving numerical calculations.

ESci 5204 Geostatistics and Inverse Theory
3 credit(s);
Instructor: Revenaugh, Justin
Description: Student may contact the instructor or department for information.

ESci 5205 Fluid Mechanics in Earth and Environmental Sciences
3 credit(s);
Instructor: Saar, Martin O.
Description: This introductory course to fluid mechanics covers the physics of fluid flow in geological, geophysical, and environmental processes. We will derive and apply the governing flow equations from conservation of mass, energy, and momentum. These equations describe flow in many Earth and Environmental Science processes including fluid flow in oceans, lakes, rivers, and the atmosphere; flow of the Earth's mantle or outer core; wave propagation; porous medium flow in soils and fractures; and diffusive, advective, and dispersive transfer of heat and certain tracers, chemicals, contaminants, and microbes within subsurface fluids. However, exact solutions can often only be found for a few special cases. Thus, justifiable assumptions must often be made to solve real problems. Hence, the course will emphasize 1) critical analysis of assumptions that enter derivations or modifications of equations, 2) dimensional analysis and similitude, and 3) solving of specific problems in the Earth and Environmental Sciences. Other topics may include fluid rheology, convection, turbulent flow, porous flow, and poroelasticity.

ESci 5302 Isotope Geology
A-F only, 3 credit(s);
Instructor: Ito, Emi
Description: This graduate course is intended for those students who either expect to include isotope studies in their thesis work, or for those who need some proficiency in understanding and evaluating isotope data and their interpretation. Half of the course deals primarily with radiogenic isotope chronometers and tracers including nuclear stability and radioactivity, isotope dilution methods, counting statistics, K-Ar, Ar-Ar, Rb-Sr, Sm-Nd, U-Pb, C-14 and U-series disequilibrium systematics. The other half of the course deals with the principles of stable isotope fractionation, and various applications to petrologic, hydrologic, paleoclimatic, and biological studies. Homework sets are designed in increase the understanding of the concepts covered in class.
Style: 100% Lecture.
Grading: 35% mid exam, 45% final exam, 20% other evaluation. homework
Exam Format: short answers, problem solving and short essays
ESci 5302 Isotope Geology
A-F only, 3 credit(s);
Instructor: Edwards, Lawrence
Description: This graduate course is intended for those students who either expect to include isotope studies in their thesis work, or for those who need some proficiency in understanding and evaluating isotope data and their interpretation.
Half of the course deals primarily with radiogenic isotope chronometers and tracers including nuclear stability and radioactivity, isotope dilution methods, counting statistics, K-Ar, Ar-Ar, Rb-Sr, Sm-Nd, U-Pb, C-14 and U-series disequilibrium systematics. The other half of the course deals with the principles of stable isotope fractionation, and various applications to petrologic, hydrologic, paleoclimatic, and biological studies. Homework sets are designed in increase the understanding of the concepts covered in class.
Style: 100% Lecture.
Grading: 35% mid exam, 45% final exam, 20% other evaluation. homework
Exam Format: short answers, problem solving and short essays

ESci 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: ESCI/MATS 5353 aims to familiarize students with the physics behind and instrumentation of electron microprobe analysis. Topics include beam generation, electron lenses, specimen preparation, electron-specimen interactions, X-ray generation, energy-dispersive and wavelength-dispersive spectrometry, matrix correction methods, and other relevant topics. Students will get hands-on experience on the department's JEOL JXA-8900R Electron Probe Microanalyzer and gain enough practice for routine imaging and chemical analysis during the lab portion of the class.
Grading: 20% mid exam, 25% final exam, 20% quizzes, 10% written homework, 5% attendance, 20% laboratory evaluation.
Exam Format: Exams and quizzes will be composed of essay and short-answer questions, label illustrations and charts, and use problem-solving and critical-thinking skills.

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: ESCI/MATS 5353 aims to familiarize students with the physics behind and instrumentation of electron microprobe analysis. Topics include beam generation, electron lenses, specimen preparation, electron-specimen interactions, X-ray generation, energy-dispersive and wavelength-dispersive spectrometry, matrix correction methods, and other relevant topics. Students will get hands-on experience on the department's JEOL JXA-8900R Electron Probe Microanalyzer and gain enough practice for routine imaging and chemical analysis during the lab portion of the class.
Grading: 20% mid exam, 25% final exam, 20% quizzes, 10% written homework, 5% attendance, 20% laboratory evaluation.
Exam Format: Exams and quizzes will be composed of essay and short-answer questions, label illustrations and charts, and use problem-solving and critical-thinking skills.

ESci 5503 Advanced Petrology
3 credit(s);
Instructor: Hirschmann, Marc M
Description: Student may contact the instructor or department for information.

ESci 5504W Neotectonics
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kleinspehn, Karen L
Description: This course focuses on Recent and active tectonics of the Earth's lithosphere, emphasizing new developments in the geosciences as well as current issues relevant to global society. Topics include modern global plate motions, geodetic techniques, seismicity, climatically driven tectonics, dynamics of converging oceanic and continental plates, the fate of subducted slabs, the behavior of back-arc regions, subduction dynamics, forearc partitioning, transform plate margins, and continental rifting. Active plate boundaries are examined through a multi-disciplinary approach from their surface processes down to their mantle dynamics. No textbook is assigned, but vigorous class discussion derives from lectures. Written critical reviews are assigned from the current geoscience literature. In addition, students write a 10-12 page paper that addresses either a geographic area representing the student's tectonic interests or a fundamental problem in neotectonics. Students are also asked to present their paper as an informal, in-class presentation. A primary goal of this course is to develop professional communication skills, especially writing as practiced in the geosciences. No exams are given. This is an upper-level course for undergraduates and graduate students.
Style: 55% Lecture, 35% Discussion, 10% Student Presentation.
Grading: 40% reports/papers, 10% written homework, 30% reflection paper, 20% in-class presentation.
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 8402 Biogeochemical Cycles in the Ocean  
3 credit(s); [Chem 1021, Chem 1022] or instr consen Credit will not be granted if credit has been received for: ESCI 4402;  
Instructor: Matsumoto, Katsumi  
Description: Student may contact the instructor or department for information.

ESci 8511 Mechanics of Sediment Transport  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: CE 8511;  
Instructor: Hill, Kimberly M.  
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: 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.  
Grading: 80% reports/papers, 20% class participation.

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: Gao, Ruchen  
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 ethnic 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, 4 credit(s); Meets CLE req of Technology and Society
- **Instructor:** Finstuen, Joshua Allen
- **Description:** Student may contact the instructor or department for information.

**Echo 3301 Clinical Practicum I**
- A-F only, 9 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, 2 credit(s);
- **Instructor:** Finstuen, Joshua Allen
- **Description:** Student may contact the instructor or department for information.

**Echo 4401 Clinical Practicum IV**
- A-F only, 9 credit(s);
- **Instructor:** Finstuen, Joshua Allen
- **Description:** Student may contact the instructor or department for information.

### Ecology, Evolution, and Behavior 100 Ecology Building

**EEB 3001 Ecology and Society**
- A-F only, 3 credit(s); Jr or sr recommended; biological sciences students may not apply cr toward major
- **Credit will not be granted if credit has been received for:** BIOL 3407; Meets CLE req of Environment
- **Instructor:** Powers, Jennifer Sarah
- **Description:** This course introduces basic concepts in ecology for non-majors, with an emphasis on the application of ecological principles to questions facing society. The three main themes of the course are: 1) natural history and environmental controls on individuals and ecosystems, 2) populations and communities, and 3) ecosystems, landscapes, and global ecology.
- **Style:** 60% Lecture, 35% Discussion, 5% Student Presentation.
- **Grading:** 30% mid exam, 20% final exam, 30% reports/papers, 10% written homework, 10% in-class presentation.
- **Exam Format:** Short-answer, short-essay and graphical interpretation questions.

**EEB 4129 Mammalogy**
- A-F only, 4 credit(s); Biol 1001 or Biol 2012
- **Credit will not be granted if credit has been received for:** FW 4129
- **Instructor:** Jansa, Sharon A
- **Description:** A course in mammalian biology, including topics in anatomy, evolution, biogeography, behavior, and ecology. Lab emphasizes identification, distribution, and natural history of mammals, with a focus on North American species. Course is targeted towards upperclass undergraduate biology majors and first or second year graduate students. Biol 1001 or 1009 is a required prerequisite; Biol 2012 is recommended.
- **Style:** 60% Lecture, 10% Discussion, 30% Laboratory.
- **Grading:** 30% mid exam, 25% final exam, 15% reports/papers, 30% laboratory evaluation.
**EEB 4329 Primate Ecology and Social Behavior**  
A-F only, 3 credit(s);  
**Instructor:** Wilson, Michael Lawrence  
**Description:** An introduction to primate ecology and social behavior for upper level undergraduates and graduate students with a good background knowledge in evolutionary biology. Primates are used as a model system to explore basic questions in animal and human behavior including factors influencing sociality and group composition, mating systems, the prevalence of altruistic, cooperative and aggressive behavior, the strength of social bonds in different species, and the evolution of intelligence and culture.  
**Style:** 63% Lecture, 10% Film/Video, 20% Discussion, 6% Field Trips.  
**Grading:** tba

**EEB 4609W Ecosystem Ecology**  
3 credit(s); Meets CLE req of Environment; meets CLE req of Writing Intensive  
**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 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 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:** Cotner, James B  
**Description:** The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. ? Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. ? Often students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. ? Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research  
**Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.**

**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:** Cotner, James B  
**Description:** The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. ? Students who pursue 4794W directed research must work with
their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

**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:** Jansa, Sharon A

**Description:** The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

**EEB 4993 Directed Studies**

**S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;**

**Instructor:** Cotner, James B

**Description:** The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

**EEB 4994 Directed Research**

**S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;**

**Instructor:** Oberhauser, Karen S

**Description:** The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to...
devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

EEB 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Cotner, James B
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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 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 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

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**EEB 8201 Graduate Foundations in Ecology, Evolution and Behavior Semester 1**

A-F only, 4 credit(s);

**Instructor:** Travisano, Michael

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

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**EEB 8301 Prelim Proposal Writing Seminar**

S-N only, 1 credit(s);

**Instructor:** Shaw, Ruth Geyer

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

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**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.

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**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.

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**EEB 8980 Seminar on Current Topics**

S-N only, 1 credit(s), max credits 30, 10 completions allowed;

**Instructor:** Finlay, Jacques C

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

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**EEB 8980 Seminar on Current Topics**

S-N only, 1 credit(s), max credits 30, 10 completions allowed;

**Instructor:** Finlay, Jacques C

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

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**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.

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**EEB 8990 Graduate Seminar**

1-3 credit(s), max credits 30, 10 completions allowed;
Econ 1101 Principles of Microeconomics
4 credit(s); knowledge of plane geometry and advanced algebra credit will not be granted if credit received for: 1104, 1111, ApEc 1101; Credit will not be granted if credit has been received for: APEC 1101; Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: STAFF
Description: Econ 1101 satisfies the CLE requirements of the Social Science Core and of the Global Perspectives Theme. This is an introductory course in Economics. Topics covered include the behavior of consumers, firms, and markets in the domestic and world economy. Interdependencies in the global economy, and effects of global linkages on individual decisions.
Style: 75% Lecture, 25% Discussion.
Grading: All ECON 1101 students (in all sections) will take the midterm exams and final exam at the same time/day; there will be evening exams.
Exam Format: All ECON 1101 lectures (and accompanying recitation sections) will have two common midterm exams and one common final exam. These will be in the evening and will be announced on the course syllabi.

Econ 1102 Principles of Macroeconomics
4 credit(s); [1101 or equiv], knowledge of plane geometry and advanced algebra credit will not be granted if credit received for: 1105, 1112, ApEc 1102; Credit will not be granted if credit has been received for: APEC 1102;
Instructor: STAFF
Description: This is an introductory course in Economics, to be taken after completing Econ 1101. It includes the study of macroeconomic indicators; the role of money; role of fiscal and monetary policy; international trade; interdependencies among nations.
Style: 75% Lecture, 25% Discussion. discussion section
Econ 3101 Intermediate Microeconomics
4 credit(s); [ECON 3101, 3102] 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 4162 Microeconomic Analysis
A-F only, 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 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
Econ 4331W Comparative Economic Systems
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
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: essay, short problems

Econ 4431W International Trade
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
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
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
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 4741H Honors: Quantitative Analysis of the Macroeconomy
4 credit(s);
Instructor: STAFF
Style: 95% Lecture, 5% Discussion.
Exam Format: problems, short essays

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);[3101, 3102] or equiv Credit will not be granted if credit has been received for: ECON 3801;
Instructor: STAFF
Style: 95% Lecture, 5% Discussion.
Exam Format: Short essays, problem solving

Econ 4831 Cost-Benefit Analysis
3 credit(s);3101 or equiv Credit will not be granted if credit has been received for: ECON 4611H;
Instructor: STAFF
Description: Principles for evaluating benefits and costs of public projects or programs. Issues concerned with definition of benefits and costs. Rate of return, rate of discount. Market imperfections, risk, and uncertainty. Case studies.
Style: 95% Lecture, 5% Discussion.
Exam Format: Essay; problem solving

Econ 4960H Advanced Topics in Economics Honors
A-F only, 4 credit(s), max credits 8;
Instructor: Allen,Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 4993 Directed Study
1-4 credit(s), max credits 4, 1 completion allowed;
Instructor: STAFF
Description: This is for economics honors theses only.

Econ 5890 Economics of the Health-Care System
A-F only, 3 credit(s);3101 or instr consent Credit will not be granted if credit has been received for: PUBH 6832;
Instructor: Nyman,John A.
Description: This course is intended to give the student an understanding of and appreciation for the traditional issues in health economics. Historical, theoretical and empirical perspectives are applied to the various topics covered: the role of prices, the production of health, the demand for health care, the demand for health insurance, the health insurance market and managed care, the market for physicians' services, production and cost of health care in hospitals and nursing homes, labor issues, pharmaceuticals, cost effectiveness analysis, equity and efficiency, role of government in the health economy, international comparisons, Medicaid and Medicare, and national health insurance and reform. The course relies on the use of conventional microeconomic analytical tools. Students should also have a basic knowledge of fundamental descriptive and analytical statistics. Students will not be expected to know calculus.

Econ 8001 Microeconomic Analysis
2 credit(s);
Instructor: Werner,Jan
Description: Student may contact the instructor or department for information.
Econ 8002 Microeconomic Analysis
2 credit(s);
Instructor: Allen, Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 8101 Microeconomic Theory
2 credit(s);
Instructor: Werner, Jan
Description: Student may contact the instructor or department for information.

Econ 8102 Microeconomic Theory
2 credit(s);
Instructor: Allen, Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 8105 Macroeconomic Theory
2 credit(s);
Instructor: Kehoe, Timothy J
Description: Student may contact the instructor or department for information.

Econ 8106 Macroeconomic Theory
2 credit(s);
Instructor: Jones, Larry
Description: Student may contact the instructor or department for information.

Econ 8185 Advanced Topics in Macroeconomics
2 credit(s), max credits 4;
Instructor: McGrattan, Ellen Rose
Description: Student may contact the instructor or department for information.

Econ 8185 Advanced Topics in Macroeconomics
2 credit(s), max credits 4;
Instructor: Guvenen, Fatih
Description: Student may contact the instructor or department for information.

Econ 8191 Workshop in Mathematical Economics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Rustichini, Aldo
Description: Student may contact the instructor or department for information.

Econ 8191 Workshop in Mathematical Economics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Allen, Beth Elaine
Description: Student may contact the instructor or department for information.

Econ 8205 Applied Econometrics
2 credit(s);
Instructor: Petrin, Amil Kenneth
Description: Student may contact the instructor or department for information.

Econ 8206 Applied Econometrics
2 credit(s);
Instructor: Petrin, Amil Kenneth
Description: Student may contact the instructor or department for information.

Econ 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 8491 Workshop in Trade and Development
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Kehoe, Timothy J
Description: Student may contact the instructor or department for information.

Econ 8501 Wages and Employment
2 credit(s), max credits 4;
Instructor: Heathcote, Jonathan
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: Wright, Randall Douglas
Description: Student may contact the instructor or department for information.

Econ 8791 Workshop in Macroeconomics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: Rios-Rull, Victor
Description: Student may contact the instructor or department for information.

Econ 8791 Workshop in Macroeconomics
1-3 credit(s), max credits 10, 10 completions allowed;
Instructor: McGrattan, Ellen Rose
Description: Student may contact the instructor or department for information.

Econ 8801 Public Economics
2 credit(s), max credits 4;
Instructor: Jones, Larry
Description: Student may contact the instructor or department for information.

Econ 8801 Public Economics
2 credit(s), max credits 4;
Instructor: Phelan, Christopher James
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: Going Global: Planning, Preparing, Maximizing
1 credit(s), max credits 6, 6 completions allowed;
Description: 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. Involve a variety of self discovery activities, this course will help you discover your unique brand and will end with a roadmap to the actual launch of your online identity.

EdHD 1620 Current Topics: Strategies for Student Success: Graduate School: Exploring, Preparing, Applying  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Krause, Miriam O  
Description: Student may contact the instructor or department for information.

EdHD 1620 Current Topics: Strategies for Student Success: Building your Professional Network  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Heier, Maggie Cosgrove  
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

EdHD 1620 Current Topics: Strategies for Student Success: Preparing for Meaningful Internships  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Maples, Alyssa  
Description: This course is designed to expose students to the various ways in which they can gain meaningful experiences that will boost their resume and prepare them to find ideal work experiences after graduation. Meaningful Internships will look at resources, techniques and best practices to find opportunities that relate to a student’s career and experiential development. This class takes into account all developmental levels of students and helps them to find experiences and resources that will expand their knowledge and skill and help them identify other experiences to assist them in reaching their goals.

EdHD 1620 Current Topics: Strategies for Student Success: Developing your Digital Brand  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Calhoun PhD, Austin Stair  
Description: Student may contact the instructor or department for information.

EdHD 1620 Current Topics: Strategies for Student Success: Effective Interviewing  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Bartley, Christine Giefer  
Description: Student may contact the instructor or department for information.

EdHD 1620 Current Topics: Strategies for Student Success: Navigating Difficult Conversations  
1 credit(s), max credits 6, 6 completions allowed;  
Instructor: Weiley, Kelly Coletta  
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: 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.

EdHD 3001 Exploring the Teaching Profession I
A-F only, 2 credit(s);
Instructor: Stone, Karla
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 program Credit 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 recommended Credit will not be granted if credit has been received for: EPSY 3119;
Instructor: Van Boekel, Martin
Description: Student may contact the instructor or department for information.

EdHD 5005 School and Society
A-F only, 2 credit(s);
Instructor: Tobin, Jessica I
Description: Student may contact the instructor or department for information.

EdHD 5007 Technology for Teaching and Learning
A-F only, 1.5 credit(s);
Instructor: Chang, Yeng Lee
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: Ellis, Joshua Alexander  
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: Walder, Samantha Muriel  
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 5008 Reading in the Content Areas for Initial Licensure Candidates  
A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;  
Instructor: Hoeschen, Emily Jo  
Description: Student may contact the instructor or department for information.

EdHD 5009 Human Relations: Applied Skills for School and Society  
A-F only, 1 credit(s);  
Instructor: Kennedy, Douglas P  
Description: Student may contact the instructor or department for information.

EdHD 5010 Cultures, Schools, and Communities (Human Relations)  
A-F only, 2 credit(s);  
Instructor: Goh PhD, Michael P.  
Description: Student may contact the instructor or department for information.

EdHD 5013 Child and Adolescent Development for Teaching and Learning  
A-F 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: 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: Leinen, Amy Bethel  
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: Kelley, Mary Beth  
Description: Student may contact the instructor or department for information.
EdHD 5300 Special Topics in Education and Human Development: Literacy Instruction in the Elementary Grades
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: Building Online Learning Communities
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Doering, Aaron H
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Preschoolers in Movement: Exploring Their World
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: Working with Parents: Considerations for Special P
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: Infant and Toddlers Exploring their World
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: Bridging Education and Mental Health
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Hjelseth, Leah R
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Integration Curriculum 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.
Instructor: Roehrig,Gillian Heather
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Supporting Stressed Relationships Through RBT
A-F only, 1-6 credit(s), max credits 12, 7 completions allowed;
Instructor: Barrow,Jill Kathleen
Description: Student may contact the instructor or department for information.

EdHD 5300 Special Topics in Education and Human Development: Infant and Toddlers Exploring their World
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 2601 Understanding Differences, Disabilities and the Career of Special Education
A-F only, 4 credit(s);
Instructor: Hupp,Susan Candis
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: Van Boekel,Martin
Description: Student may contact the instructor or department for information.

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: Van Boekel,Martin
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.

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**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: Vue, Kory
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: Brown, Ethan
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: Sabbag, Anelise Guimaraes
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: Justice, Nicola Parker
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: Sabbag, Anelise Guimaraes
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: delMas, Robert Claude  
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: Davenport Jr, Ernest C
Description: Student may contact the instructor or department for information.

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: Stanke, Luke David
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: Beckman, Matt
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: Chung, Chu-Ting
Description: Student may contact the instructor or department for information.

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 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 5609 Family-centered Services  
A-F only, 2 credit(s);  
Instructor: Larson, Anne Louise  
Description: Student may contact the instructor or department for information.

EPsy 5611W Research-based Practices in Academic and Behavior Disabilities  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Seifert PhD, Kathy  
Description: Student may contact the instructor or department for information.

EPsy 5613 Foundations of Special Education I  
A-F only, 3 credit(s);  
Instructor: Seifert PhD, Kathy  
Description: Student may contact the instructor or department for information.

EPsy 5613 Foundations of Special Education I  
A-F only, 3 credit(s);  
Instructor: Kunkel, Amy Katherine  
Description: Student may contact the instructor or department for information.

EPsy 5613 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 5616 Classroom Management and Behavior Analytic Problem Solving  
3 credit(s);  
Instructor: Simacek, Jessica Jo  
Description: Student may contact the instructor or department for information.

EPsy 5616 Classroom Management and Behavior Analytic Problem Solving  
3 credit(s);  
Instructor: Kunkel, Amy Katherine  
Description: Student may contact the instructor or department for information.

EPsy 5616 Classroom Management and Behavior Analytic Problem Solving  
3 credit(s);  
Instructor: Barnhill, James T  
Description: Student may contact the instructor or department for information.

EPsy 5618 Specialized Interventions for Students With Mild/Moderate Disabilities in Reading & Written Language  
A-F only, 3 credit(s);  
Instructor: Pierce, Becca L.  
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
**EPsy 5625 Education of Infants, Toddlers, and Preschool Children with Disabilities: Introduction**  
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);  
**Instructor:** Hyppa Martin, Jolene K  
**Description:** Student may contact the instructor or department for information.

**EPsy 5632 Module 2: Evidence-based Methods for AAC Assessment and Intervention**  
A-F only, 2 credit(s);  
**Instructor:** Hyppa Martin, Jolene K  
**Description:** Student may contact the instructor or department for information.

**EPsy 5633 Module 3: Speech-generating Devices and High-Tech AAC**  
A-F only, 1 credit(s);  
**Instructor:** Hyppa Martin, Jolene K  
**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:** Walker, Terry M.  
**Description:** Student may contact the instructor or department for information.

**EPsy 5657 Interventions for Behavioral Problems in School Settings**  
A-F only, 3 credit(s);  
**Instructor:** Neal, Rebecca Ann  
**Description:** Student may contact the instructor or department for information.

**EPsy 5657 Interventions for Behavioral Problems in School Settings**  
A-F only, 3 credit(s);  
**Instructor:** Parker-McGowan, Quannah Elizabeth  
**Description:** Student may contact the instructor or department for information.

**EPsy 5661 Introduction to Autism Spectrum Disorder**  
A-F only, 3 credit(s);  
**Instructor:** Wolff, Jason James  
**Description:** Student may contact the instructor or department for information.

**EPsy 5663 Assessment and Intervention for Individuals with Autism Spectrum Disorders**  
A-F only, 3 credit(s);  
**Instructor:** Fleury, Veronica Pamparo  
**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 5705 Practicum in ECSE/Elementary Settings
S-N only, 1 credit(s);
Instructor: Walker, Terry M.
Description: Student may contact the instructor or department for information.

EPsy 5720 Special Topics: Special Education: Assessment & Due Process in Special Education
3 credit(s), max credits 12, 12 completions allowed;
Instructor: Seifert PhD, Kathy
Description: Student may contact the instructor or department for information.

EPsy 5720 Special Topics: Special Education: Practicum/SpEd Core Practices: Beh Intervention
2 credit(s), max credits 12, 12 completions allowed;
Instructor: Neal, Rebecca Ann
Description: Student may contact the instructor or department for information.

1 credit(s), max credits 12, 12 completions allowed;
Instructor: Snidarich, Stephanie Marie
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: Walker, Terry M.
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: Zeyer, Virginia Kay
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: Zeyer, Virginia Kay
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: Zeyer, Virginia Kay
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: Johnson, LeAnne Denise
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: Johnson, LeAnne Denise
Description: Student may contact the instructor or department for information.
EPsy 5802 Foundations of Developmental Psychology Across the Lifespan
A-F only, 3 credit(s);
Instructor: Buerkle, Karla
Description: Student may contact the instructor or department for information.

EPsy 5853 Biological Bases of Behavior
A-F only, 3 credit(s);
Instructor: Semrud-Clikeman, Margaret Elaine
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 8113 The Psychology of Scientific Reasoning
3 credit(s);
Instructor: Varma, Keisha
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: Kendeou, Panayiota A.
Description: CONCEPTUAL CHANGE: RESEARCH & PRACTICE. Learning often involves the revision of prior knowledge at the level of systems, at the level of individual concepts, and of course at the level of individual beliefs. This type of learning is known as conceptual change. In this seminar, we will focus on the discussion of current research in the area of conceptual change learning with the aim to advance our understanding of the underlying cognitive processes involved in knowledge revision and their implications for pedagogy and assessment. Main topics include current theories of conceptual change learning, processes and mechanisms of change, conceptual change in different domains (e.g., science, math, physics), influences of learner characteristics (e.g., prior knowledge, epistemological beliefs, motivation, engagement), instructional approaches for conceptual change, and challenges in conceptual change research. Graduate students are invited to register for the course, regardless of disciplinary background. For questions or more information, please contact Dr. Panayiota (Pani) Kendeou (kend0040@umn.edu).

EPsy 8114 Seminar: Cognition and Learning
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Varma, Sashank
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 8251 Methods in Data Analysis for Educational Research I
3 credit(s);
Instructor: Zieffler PhD, Andrew S
Description: Student may contact the instructor or department for information.

EPsy 8252 Methods in Data Analysis for Educational Research II
3 credit(s);
Instructor: Zieffler PhD, Andrew S
Description: Student may contact the instructor or department for information.

EPsy 8261 Statistical Methods I: Probability and Inference
3 credit(s);
Instructor: 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.

3 credit(s), max credits 9, 3 completions allowed;
Instructor: delMas, Robert Claude
Description: Student may contact the instructor or department for information.

EPsy 8402 Individual Counseling: Theory and Applications
A-F only, 3 credit(s);
Instructor: Romano, John L
Description: Student may contact the instructor or department for information.

EPsy 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 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
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 8512 Internship: CSPP
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Veach PhD,LP,Patricia McCarthy
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: Hupp,Susan Candis
Description: Student may contact the instructor or department for information.

EPsy 8706 Single Case Designs in Intervention Research
3 credit(s);
Instructor: Symons,Frank J
Description: Student may contact the instructor or department for information.

EPsy 8708 Functional Behavior Assessment
A-F only, 3 credit(s);
Instructor: McComas,Jennifer
Description: Student may contact the instructor or department for information.

EPsy 8811 Assessment in School Psychology I: Foundations of Academic Assessment
A-F only, 3 credit(s);
Instructor: Christ,Theodore J
Description: Student may contact the instructor or department for information.

EPsy 8813 Assessment Practicum in School Psychology
A-F only, 2 credit(s), max credits 4;
Instructor: Christ,Theodore J
Description: Student may contact the instructor or department for information.

EPsy 8816 Individual and Systems Academic Interventions
A-F only, 3 credit(s);
Instructor: Parker,David C
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: Parker,David C
Description: Student may contact the instructor or department for information.

EPsy 8821 Issues in School Psychology
A-F only, 3 credit(s);
Instructor: Hansen-Burke,Annie
Description: Student may contact the instructor or department for information.

EPsy 8822 Research in School Psychology
A-F only, 1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: Christ,Theodore J
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: Hansen-Burke, Annie
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: Hansen-Burke, Annie
Description: Student may contact the instructor or department for information.

EPsy 8841 Practicum: Instruction and Supervision in School Psychology
A-F only, 3 credit(s), max credits 6;
Instructor: Hansen-Burke, Annie
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.

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: Cho, Jeong-Hyun
Description: Student may contact the instructor or department for information.

EE 2002 Introductory Circuits and Electronics Laboratory
1 credit(s);
Instructor: Cohen, Philip I
Description: Student may contact the instructor or department for information.

EE 2006 Introductory Circuits Laboratory
0.5 credit(s);
Instructor: Cohen, Philip I
Description: Student may contact the instructor or department for information.

EE 2011 Linear Systems, Circuits, and Electronics
3 credit(s);
Instructor: Imbertson, Paul Jay
Description: Student may contact the instructor or department for information.

EE 2101 Introduction to Electronics I
1.5 credit(s);
Instructor: Orser, David
Description: Student may contact the instructor or department for information.

EE 2103 Introduction to Electronics II
1 credit(s);
Instructor: Orser, David
Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
4 credit(s);
Instructor: Riedel, Marc
Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
4 credit(s);
Instructor: Riedel, Marc
Description: Student may contact the instructor or department for information.

EE 2301 Introduction to Digital System Design
4 credit(s);
Instructor: Riedel, Marc
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: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 3006 Fundamentals of Electrical Engineering Laboratory
1 credit(s);
Instructor: Higman, Ted King
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
EE 3041 Industrial Assignment I
A-F only, 2 credit(s);
Instructor: Mazumdar, Arya
Description: Student may contact the instructor or department for information.

EE 3101 Circuits and Electronics Laboratory I
2 credit(s);
Instructor: Evan, Barbara Kettler
Description: Student may contact the instructor or department for information.

EE 3102 Circuits and Electronics Laboratory II
2 credit(s);
Instructor: Robbins, William P
Description: Student may contact the instructor or department for information.

EE 3115 Analog Electronics
3 credit(s);
Instructor: Robbins, William P
Description: Student may contact the instructor or department for information.

EE 3161 Semiconductor Devices
3 credit(s);
Instructor: Koester, Steven J
Description: Student may contact the instructor or department for information.

EE 3601 Transmission Lines, Fields, and Waves
3 credit(s);
Instructor: Ernie, Douglas
Description: Student may contact the instructor or department for information.

EE 3990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 12, 6 completions allowed;
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: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 4235 Linear Control Systems Laboratory
1 credit(s);
Instructor: Georgiou, Tryphon T
Description: Lab to accompany 4231
EE 4301 Digital Design With Programmable Logic
4 credit(s);
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 4363 Computer Architecture and Machine Organization
4 credit(s); 2361 credit will not be granted if credit received for: 5361, CSci 5201, Credit will not be granted if credit has been received for: CSCI 4203;
Instructor: Karpuzcu, Rahmet Ulya
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 4389W 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 Th - 11:15-12 and Thur 3 pm Lecture time and place Tue Th, 9:45 to 11:00am, 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: Mahmoodi PhD, Abolghassem B
Description: Student may contact the instructor or department for information.

EE 4541 Digital Signal Processing
3 credit(s);
Instructor: Ebbini, Emad S
Description: Review of linear discrete time systems and sampled and digital signals; Fourier analysis, discrete and fast Fourier transforms; interpolation and decimation; design of analog, infinite-impulse response and finite impulse response filters; quantization effects.

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: Mohan, Ned
Description: This course is intended to provide a complete overview of Power Electronics that is an enabling technology for energy conservation and utilizing renewable energy resources. Topics include switch-mode DC Power Supplies; switch-mode Converters for DC and AC Motor Drives, Wind/Photovoltaic Inverters, interfacing power electronics equipment with Utility System; power semiconductor devices, magnetic design, etc. Associated with this course are PSpice-based examples and exercises. The textbook (less than 300 pages) is written specifically for such a course by the instructor; it can be purchased at a very low cost from the university bookstore. Totally as an option, students in this lecture course can opt to construct a dc-dc converter from a kit with surface-mount parts. Optional related hardware laboratory is EE 4743.

EE 4743 Switch-Mode Power Electronics Laboratory
1 credit(s);
Instructor: Mohan, Ned
Description: This hardware laboratory is intended to complement the lecture material in EE4741. It consists of hardware experiments on various switch-mode dc-dc converters without transformer isolation such as Buck, Boost and Buck-Boost converters. It also consists of dc-dc converters with transformer isolation, such as Flyback and Forward converters. One of the experiments requires design and implementation of a feedback control loop as in regulated dc power supplies.

EE 4951W Senior Design Project
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Ernie, Douglas
Description: Student may contact the instructor or department for information.

EE 4970 Directed Study
1-3 credit(s), max credits 12, 4 completions allowed;
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 5041 Industrial Assignment for Graduate Students
S-N only, 1 credit(s);
Instructor: Victoria, Randall H
Description: Student may contact the instructor or department for information.

EE 5121 Transistor Device Modeling for Circuit Simulation
3 credit(s);
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 5163 Semiconductor Properties and Devices I
3 credit(s);
Instructor: STAFF
Description: Principles and properties of semiconductor devices. Selected topics in semiconductor materials, statistics, and transport. Aspects of transport in p-n junctions, heterojunctions.

EE 5171 Microelectronic Fabrication
4 credit(s);
Instructor: Campbell, Stephen A
Description: This course teaches the basic science and practical knowledge behind the fabrication of micro and nano structures. Although the course uses integrated circuits as its primary teaching vehicle, the topics covered can be applied
to many kinds of electrical, mechanical, optical, and magnetic structures. Specific processes covered include lithography, oxidation, etch, diffusion, chemical and physical vapor deposition, and epitaxial growth. The course also discusses the assembly of these unit processes to make various technologies including CMOS, thin film transistors, GaAs MESFET, light emitting diode and solid state lasers, solar cells, and MEMS. Extensive knowledge of the physics of the operation of these devices is not necessary.

Style: 100% Lecture.

Grading: 15% mid exam, 25% final exam, 15% reports/papers, 30% quizzes, 15% problem solving.

Exam Format: Problem Solving

EE 5173 Basic Microelectronics Laboratory
1 credit(s);
Instructor: Campbell, Stephen A
Description: Student may contact the instructor or department for information.

EE 5231 Linear Systems and Optimal Control
3 credit(s);
Instructor: Salapaka, Murti V
Description: Student may contact the instructor or department for information.

EE 5251 Optimal Filtering and Estimation
3 credit(s); [[MATH 2243, STAT 3021 or equiv], CSE grad student] or dept consent; 3025, 4231 recommended
Credit will not be granted if credit has been received for: AEM 5451;
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

EE 5301 VLSI Design Automation I
3 credit(s);
Instructor: Sapatnekar, Sachin Suresh
Description: Student may contact the instructor or department for information.

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 5351 Applied Parallel Programming
3 credit(s);
Instructor: Sartori, John M
Description: Student may contact the instructor or department for information.

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 8203
Credit will not be granted if credit has been received for: CSCI 5204;
Instructor: Yew, Pen-Chung
Description: Student may contact the instructor or department for information.

EE 5371 Computer Systems Performance Measurement and Evaluation
3 credit(s); [4363 or 5361 or CSci 4203 or 5201], [CSE grad student] or dept consent Credit will not be granted if credit has been received for: EE 5863;
Instructor: Lilja, David J
Description: The primary objective of this course is to teach computer designers and users the techniques for modeling computer systems and measuring their performance. These techniques are critical for evaluating new computer designs and for comparing existing systems. This course will concentrate on empirical, hands-on performance evaluation techniques using simulations and measurements of existing systems. An important aspect of this modeling and analysis is
In addition, the course will develop an understanding of how to use measured data to compare computer systems, and to determine how much a new architectural feature improves system performance. Course Objectives: - Learn to use appropriate statistical techniques to compare systems and interpret measured data. - Learn how to develop and apply measurement tools and techniques. - Learn how to use analytical modeling. - Learn how to appropriately design experiments. - Learn how to develop and use various types of simulations. - Learn to choose an appropriate performance evaluation technique.

**Style:** 95% Lecture, 5% Student Presentation.

**Grading:** 40% reports/papers, 25% quizzes, 25% written homework, 10% in-class presentation.

**EE 5501 Digital Communication**
- 3 credit(s);
- **Instructor:** Sidiropoulos, Nikolaos
- **Description:** Student may contact the instructor or department for information.

**EE 5531 Probability and Stochastic Processes**
- 3 credit(s);
- **Instructor:** Haupt, Jarvis David
- **Description:** Student may contact the instructor or department for information.

**EE 5581 Information Theory and Coding**
- 3 credit(s);
- **Instructor:** Mohajer, Soheil
- **Description:** Student may contact the instructor or department for information.

**EE 5616 Antenna Theory and Design**
- 3 credit(s);
- **Instructor:** Sainati, Robert A
- **Description:** The intent of this course is to have the student develop an understanding of antennas and their place in communications systems. This includes a fundamental understanding of antenna operation, and exposure to the parameters used to characterize antennas, review of antenna analysis techniques and exposure to various antenna types such as wire antennas (dipoles, loops, helices, etc.), arrays, printed antennas and reflectors. The goals of this course are to provide the student with an intuitive understanding of how antennas operate and a background in the theory of antennas so that the student will be able to either effectively utilize antennas and/or continue with advanced studies of antennas. In addition, the course will provide practical information to allow for antenna design. Some introduction to antenna CAD tools will also be provided. Course grade will be based on scores achieved through homework assignments and two exams (mid-term and final).

**EE 5624 Optical Electronics**
- 4 credit(s);
- **Instructor:** Gopinath, Anand
- **Description:** Student may contact the instructor or department for information.

**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 5657W Physical Principles of Thin Film Technology**
- 4 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Stadler, Bethanie J. Hills
- **Description:** This course covers the fabrication, characterization, and modern applications of thin films and nanostructures. Fabrication topics include vacuum technology, physical and chemical vapor deposition (CVD), and electrochemical deposition. The properties of resulting films are compared to each other and to bulk materials. Characterization techniques are reviewed. Finally, engineering the properties of films and nanostructures for applications in microfluidics, plasmonics, integrated photonics, nanoelectromechanical systems (NEMS), and nanoelectronics is important for optimized device performance. Therefore applications are the final topic taught and discussed as a summary of the
A hands-on, team-based laboratory gives students experience with the fabrication techniques. The lab also exposes students to the facilities around campus so they will have a practical knowledge of specialized characterization. Each student completes a literature review, gives a presentation, and does a team lab report, all of which can be used towards the MSEE Plan C.

**Style:** 60% Lecture, 40% Laboratory. Laboratory times may need to vary from course guide times depending on schedule of teaching assistant.

**Grading:** 15% reports/papers, 40% written homework, 5% in-class presentation, 40% laboratory evaluation. Class work is individually graded, including a literature review project on topic of students choice. Laboratory is half individually graded and half a team grade.

**EE 5725 Power Systems Engineering**
- 3 credit(s);
- **Instructor:** Wollenberg, Bruce F
- **Description:** Student may contact the instructor or department for information.

**EE 5745 Wind Energy Essentials**
- 2 credit(s);
- **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:** 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:** 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,Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Higman,Ted King
Description: Student may contact the instructor or department for information.
EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Kaveh, Mostafa
Description: Student may contact the instructor or department for information.

EE 5990 Curricular Practical Training
S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Lilja, David J
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
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EE 5990 Curricular Practical Training
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S-N only, 1-2 credit(s), max credits 6, 3 completions allowed;
Instructor: Mazumdar,Arya
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EE 8163 Quantum Electronics
A-F only, 3 credit(s);
Instructor: Talghader,Joseph John
Description: Student may contact the instructor or department for information.

EE 8500 Seminar: Communications
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Giannakis,Georgios B
Description: Student may contact the instructor or department for information.

EE 8591 Predictive Learning from Data
3 credit(s);
Instructor: Cherkassky,Vladimir S
Description: COURSE DESCRIPTION: Methods for estimating dependencies from data have been traditionally explored in such diverse fields as: Statistics (multivariate regression and classification), Engineering (pattern recognition, system identification) and Computer Science (artificial intelligence, machine learning, data mining). Recent interest in learning methods triggered by the widespread use of computers and database technology has resulted in the development of biologically motivated methodologies, such as (artificial) neural networks, fuzzy systems and wavelets. Unfortunately, developments in each field are seldom related to other fields. Many data mining application lead to predictive learning methods, where available (historical) data is used to estimate models with high generalization capability (i.e., models capable of prediction or decision making with new data). This course will first provide general conceptual framework for learning dependencies from data, and then discuss predictive learning methods developed in statistics, pattern recognition and machine learning. COURSE PROJECTS: Each student is expected to complete a project (of research nature). A list of project topics will be distributed during 2-d week of class. Students will receive close supervision and feedback on their projects from the instructor. Students may propose their own project topic, subject to the instructor's approval. During the last week of class, students will give a short (~15 min) oral presentation of their project. TEXTBOOK: Learning from Data, by V. Cherkassky and F. Mulier, Second Edition, Wiley-Interscience

EE 8611 Plasma Physics
3 credit(s);
Instructor: Ernie,Douglas
Description: Student may contact the instructor or department for information.

EE 8660 Seminar: Magnetics
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Victora,Randall H
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EE 8940 Special Investigations
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Instructor: Imbertson,Paul Jay
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Instructor: Wollenberg, Bruce F
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Posbergh, Thomas Alfred
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Parhi, Keshab K.
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Harjani, Ramesh
Description: Student may contact the instructor or department for information.
EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Cohen, Philip I
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ruden, P Paul
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Georgiou, Tryphon T
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Stadler, Bethanie J. Hills
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Higman, Ted King
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Kaveh, Mostafa
Description: Student may contact the instructor or department for information.

EE 8967 Plan C Project II
1-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Lilja, David J
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: Mohan, Ned
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: Talghader, Joseph John
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: Cherkassky, Vladimir S
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: Holte, James Edward
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: Campbell, Stephen A
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: Hubel, Allison
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: Kinney, Larry L
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: Kieffer, John C
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: Robbins, William P
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: Sobelman, Gerald Edward
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: Leger, James Robert
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: Franklin, Rhonda 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: Ebbini, Emad S
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: Victora, Randall H
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: Giannakis, Georgios B
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: Bazargan, Kia
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: Roychowdhury, Jaijeet
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: Jacobs, Heinrich Otto Heiko
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: Roumeliotis, Stergios
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: Wang, Jianping
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: Amin, Massoud
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: Luo, Zhi-Quan
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: He, Bin
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: Jindal, Nihar
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: Kim, Chris H.
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: 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| EE 8967 Plan C Project II | 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 8967 Plan C Project II | 1-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Dhople,Sairaj  
**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: Mazumdar,Arya  
**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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| Endo 5305 Advanced Clinical Endodontics | A-F only, 1-6 credit(s), max credits 6;  
Instructor: McClanahan,Scott B  
**Description:** Student may contact the instructor or department for information. |
| Endo 5308 Advanced Clinical Endodontics | A-F only, 1-6 credit(s), max credits 6;  
Instructor: McClanahan,Scott B  
**Description:** Student may contact the instructor or department for information. |
| Endo 5312 Advanced Endodontic Emergency | S-N only, 1 credit(s);  
Instructor: McClanahan,Scott B  
**Description:** Student may contact the instructor or department for information. |
| Endo 5315 Advanced Endodontic Emergency | S-N only, 1 credit(s);  
Instructor: McClanahan,Scott B  
**Description:** Student may contact the instructor or department for information. |
| Endo 5329 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 employ 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 adverbials; gerunds, infinitives, and other types of complementation;
and lexical grammar--the grammar associated with individual words. Activities and regular assignments improve students' ability to analyze grammar, including their own mistakes, and to use grammar more effectively.

ESL 420 High Advanced Reading/Composition
S-N only, 0 credit(s), 4 completions allowed;
Instructor: STAFF
Description: ESL 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
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 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
Exam Format: Supervised, in-person (not online) exams

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 3501 Advanced English Listening and Speaking
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 or other coursework at the University of Minnesota. Students will 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 further develop both their fluency and accuracy through work on pronunciation, spoken grammar, and academic vocabulary.

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  207 Lind Hall

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: Roth-Reinhardt,Anne E
Description: Student may contact the instructor or department for information.

EngL 1181W Introduction to Shakespeare
4 credit(s); credit will not be granted if credit already received for: ENGL 1181, 1182Credit will not be granted if credit has been received for: ENGL 1181V;Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Clayton,Tom
Description: Shakespeare is deep in many ways, but he is also funny, as is the instructor, and as you are encouraged to be when you know what you are talking about. Unlike you, Shakespeare hadn't the benefit of Writing Intensive courses, but he did all right, as you will read for yourself. The language may seem remote on first acquaintance, but it comes readily into focus and color for most who are willing to make the effort and ready to be rewarded evermore with skills in reading and writing not easily attainable elsewhere. 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 because his creator was born an imaginative genius with a vocation to playwrighting in an age when 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 theatrical gift for creating dramatic actions extravagant, disturbing, hilarious, profound, and searching by turns, or several at once, was enabled by a verbal gift of extraordinary range and wit. This gift with the corresponding dialogue is the sine qua non, whether Hamlet, Ophelia, Polonius, an actor, or a gravedigger speaks. Seven representative plays, with attention to contemporary contexts and antecedents, continuing social relevance, and some recent productions, and with primary emphasis on understanding Shakespeare's writing in its habit as it lives. Knowing some plays by Shakespeare is also a necessary foundation for appreciating a new satirical play on stage in London in May 2014, Mike Bartlett's King Charles III, written in Shakespearean verse about the drastic turns in the present royal family as fictionally futurized by Bartlett. If you want to take this course with Tom Clayton, this is your last chance. If you don't, that's easy.
Style: 70% Lecture, 30% Discussion.
Grading: 15% mid exam, 35% final exam, 30% reports/papers, 15% quizzes, 5% class participation.
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 1301,1302Credit 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.

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**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:** Sugnet, Charles J

**Description:** Reading will include novels in English from Africa, India, and the Caribbean. The class will also watch at least two films and listen to some spoken-word oral poetry. Writing assignments will include a short paper early in the course and two more substantial take-home essays; some of the writing will be revised after instructor has commented on it. There will be a small amount of lecture, but the class sessions will proceed mostly by focused discussion, based on discussion topics handed out in advance.

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**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:** Matar, Nabil I

**Description:** World Literature in English: Arab Writers Nabil Matar Fall 2014, MW 10:10 am

The course examines Arab authors from 1911 to 2011. The texts will be 1. Translated from Arabic into English (including the work of Nobel Prize winner Naguib Mahfouz); or 2. Originally written in English. We will approach the material through the angles of literary history, political change, and religious identity. Readings will include novels, short stories, and plays. Students will also be able to undertake comparative studies of novels with English and French parallels, or with film adaptations. Authors include Tayyeb Salih, Hanan al-Shaykh, Jabra Ibrahim Jabra, Muhja Kahf, Amin Maalouf, Ghada Karmi, Nuruddin Farah, and others. All presentations and discussions are in English. But if you know Arabic, or want to improve your command of the language, you may choose to read material in the original. You may also write some assignments in Arabic. Requirements: Class participation 20%; short weekly essays 40%; research paper 20%; midterm 10%; final exam 10%.

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**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:** This class will explore how literary language builds the collective knowledge, shared reality, and civic relationships that make up public life. We will investigate how telling stories, documenting events, imagining possibilities, communicating ideals, and even creating fictional characters contribute to our public world. This course offers two tracks for actively engaging in public life. A service-learning option will give you the opportunity to work with others in the community to build literacy, develop skills in media and communication, and strengthen readiness for roles in work and family. Alternatively, an individually designed project will prompt you consider literature and media as a bridge between personal and private life, and to make your own intervention in these fields. Other assignments will include an oral history project and short reflective essays. Required texts include creative non-fiction best-sellers as well as critical essays and memoirs.

**Style:** 20% Lecture, 60% Discussion, 20% Small Group Activities. This course has a service-learning option that requests 20-25 hours over the semester. Non-service learning students will develop independent projects that request a similar time investment.

**Grading:** 55% special projects, 30% reflection paper, 15% class participation.

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**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: This course sets out for the intersection of literature and "public life." Sometimes it is the literature that makes the lives public through publication, and sometimes the tools of literature (investigating, documenting, narrating) are applied in order to deepen popular understanding of stories that have played out publicly through the news media. The unifying theme is that the books and films we will study aim to directly effect change in the world. This course offers a service-learning track. This option involves volunteering at a community organization for a set period of time each week. Service learning is a practice grounded in the belief that our work in the classroom not only can but should be applied to actual community issues, that your community work can promote engagement with scholarship, and that our most fundamental responsibility as active intellectuals is in preparing ourselves for lives of active citizenship. Assignments will vary according to whether you choose to follow the standard track or the service-learning track. Students in both tracks will take two quizzes and write one short essay. STANDARD TRACK The standard track is no different than a conventional literature course. In addition to the quizzes and the short essay, you will write a longer final essay and three Field Reports--short, informal, low-stakes pieces of writing designed to get you thinking about / engaging in public life. SERVICE-LEARNING TRACK In lieu of the field reports, in the service-learning track you will turn in three separate entries for your Service Learning Journal. Those shorter pieces, designed to follow a narrative template (first impressions, doing the work, reflection), will be turned into the Service Learning Portfolio, which stands in for the final essay.

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: Na, Eunha
Description: This course explores the relationship between literature and public life from multiple perspectives. It examines how literature--more simply, our reading experience--can shape and influence how we perceive ourselves in the world and how we engage in public life. In particular, we will consider how people negotiate the 'public' dimension of their everyday life with the 'personal' one by reading fictions and non-fictions. Are there conflicts between two dimensions? If so, where do these conflicts come from? How does each person deal with these gaps? The books we will read together approach these questions through various issues such as sexual orientation, disability, and ethnic/national identities in various genres and forms of writing--memoir, fiction, play, graphic novel, etc. We should bear in mind that any book or any one author does not represent any entire group, but it can illustrate ways in which these issues can be dealt with in one's own terms.

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 work with as expansive a definition of "fiction" as possible, one that includes "serious" fiction, "experimental" fiction, "genre" fiction, and the "graphic novel" (for example). The list of authors we might study includes (but is not limited to) the following: Junot Diaz, Haruki Murakami, Lorrie Moore, Sandra Cisneros, John Edgar Wideman, Louise Erdrich, Roberto Bolano, Lynda Barry, Tao Lin, Gillian Flynn, Cormac McCarthy. Grades will be based on two long 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: Tandy-Treiber, Ann Marie
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: Lawless, Annemarie
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: Krieg, Katelin M
Description: Student may contact the instructor or department for information.

EngL 1904 Topics: Freshman Seminar: Novellas and Graphic Novels
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Fitzgerald, M. J
Description: Although this is a freshman seminar in the English Department, the focus is more comparative: we will read, talk and write about short works of fiction and graphic work from South America, Africa and Europe and the Middle East as well as the UK and the US. We will read a novella by Henry James that was written more than 100 years ago, and graphic fiction by Joann Sfar published very recently, and explore some of the connections in time between very different authors, and some of the differences between countries and times.

EngL 1905 Topics: Freshman Seminar: Memoir and History
A-F only, 3 credit(s);
Instructor: Garner, Shirley Nelson
Description: "Memoir and History" will focus on twentieth-century and contemporary memoirs. Readings will include memoirs that have become canonical, such as Mary McCarthy's Memoirs of a Catholic Girlhood, Maxine Hong Kingston's The Woman Warrior, and Tobias Wolff's This Boy's Life. It will also include recent memoirs, some of them written by authors who grew up in Minnesota. They might include works such as Patricia Weaver Francisco's Telling, Michele Norris' the Grace of Silence, Kao Kalia Yang's The Latehomecomer: A Hmong Family Memoir, and Tim O'Brien's The Things They Carried. These stories offer different forms of memoir, and they tend to treat in various ways the relationship between history and memory, the meaning of place—within a family, a town or city, and a country, or "place" as otherwise understood and defined, and sometimes the experience of "growing up."

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: Majhor, Samantha Jo
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: Moberly, David C
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: Tandy-Treiber, Ann Marie
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: McHugh, Caitlin Jeanne
Description: This course is designed for English majors and minors, as well as any students interested in reading and literature. The goal of the course is to provide an introduction to textual analysis, as a means of moving past initial
reactions to an experience with a text. We will practice methods of close reading and consider how issues of form, rhetoric, and context impact our reading experience and a text's ability to engage with audiences. This course will help students develop foundational practices of close reading, while introducing students to basics of literary criticism and literary theory (New Criticism, Structuralism, Deconstruction, Psychoanalysis, Feminism, Queer Studies, Marxism, Historicism, and Post Colonial Studies). We will aim to place texts both in their historical context and in the context of literary theory. In doing so, we will examine a variety of genres (poetry, fiction, nonfiction, and drama) and time periods. This course is a writing intensive course. We will emphasize the construction of a compelling literary argument as part of a process: developing an argumentative thesis, drafting, revision, citation, and the effective use of both primary and secondary sources.

EngL 3002 Modern Literary Criticism and Theory
3 credit(s); credit will not be granted if credit already received for: EngL 3802
Instructor: Scandura,Jani
Description: Student may contact the instructor or department for information.

EngL 3002 Modern Literary Criticism and Theory
3 credit(s); credit will not be granted if credit already received for: EngL 3802
Instructor: Lawless,Annemarie
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: Krug,Rebecca L
Description: This course is a survey of the most interesting and important literature written in England from the earliest Middle Ages to 1800. For example, from the medieval period, we read works including Beowulf, Chaucer's Canterbury Tales, and selections from the Book of Margery Kempe; from the sixteenth and seventeenth centuries, we read Shakespeare's sonnets, Marlowe's Dr. Faustus, and selections from Milton's Paradise Lost; moving to the eighteenth century, our readings include Pope's Rape of the Lock and Swift's Gulliver's Travels. Although we are careful to think in terms of the literary interest of this writing, we do not treat the works that we read as timeless works of art. Rather, we are concerned with literature in relation to human experience as it arose in specific contexts and at specific times. Questions about the act of reading and writing (who is involved in written culture during this time and why was it important to these people?) are central to our analysis of literary traditions.
Style: 70% Lecture, 25% Discussion, 5% Small Group Activities.

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 3004W Historical Survey of British Literatures II
4 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Nightingale,Leslie Elizabeth
Description: This course will provide a survey of British literature from the late eighteenth century to the present. We will read novels, plays, short stories, and poems as we investigate developments in British society, politics, science, and technology. While focusing on Romantic, Victorian, and Modernist literature, we will read traditional works from the canon as well as popular pieces from the period, including Robert Louis Stevenson's Dr. Jekyll and Mr. Hyde and a Sherlock Holmes story by Sir Arthur Conan Doyle. Other authors include Jane Austen, William Wordsworth, Elizabeth Gaskell, Oscar Wilde, Virginia Woolf, and George Orwell. We will also discuss film and television adaptations of a few of the works.

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: McCulloch,Stephen Edward
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 survey course will cover important historical, political, and literary works from the first contact between America and Europe to the escalation of political tension that would become the American Civil War, roughly 1850. Important themes for these readings will be the development of a concept of a uniquely "American" culture and society (as distinct from European culture and society), the changing definition of authorship, what it means to live a public, democratic life, the expansion of political boundaries, the space of America, and the ever present problem of American slavery. As this is a survey course, coverage of what have
been considered "important" texts within the academy will be stressed. This is not to say that the works should be considered as intrinsically more worthy of being studied than other possible texts, they have simply gained a certain institutional reputation over time. In addition to becoming familiar with this body of knowledge, we will be developing critical reading skills within a "literary" context.

**Style:** Online  
**Grading:** See attached syllabus

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:** Hwang,Hyeryung  
**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.  
**Style:** Online  
**Grading:** See attached syllabus

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:** Decker,Erica Stacey  
**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:** Bherer,Valerie  
**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:** 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 a variety of genres and the chronological range of Shakespeare's career as a playwright. Likely readings: "Romeo and Juliet," "A Midsummer Night's Dream," "Richard II," "As You Like It," "Hamlet," "Twelfth Night," "Macbeth," "The Merchant of Venice," "King Lear," "The Winter's Tale," and "Antony and Cleopatra." This course fulfills a requirement for English majors, but non-majors are welcome too.  
**Style:** 25% Lecture, 75% Discussion.  
**Grading:** 60% reports/papers, 20% quizzes, 20% class participation.

EngL 3007 Shakespeare  
A-F only, 3 credit(s);credit will not be granted if credit already received for: EngL 3807Credit 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 major plays such as Romeo and Juliet, A Midsummer Night's Dream, Hamlet, Othello, 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 also 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.

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**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:** Lee, Josephine D

**Description:** When some people think of Shakespeare, they imagine knee breeches, impossibly ornate language, and overacting. Our course will try to counter those perceptions by thinking of Shakespeare as, to use Jan Kott's famous phrase, "our contemporary." We will emphasize the way that Shakespearean interpretation and production has changed over time and space, and how his plays might still challenge and please us in the theater and on the page. We will survey a range of Shakespeare's plays emphasizing both historical context and contemporary production.

**Style:** 25% Lecture, 5% Film/Video, 50% Discussion, 10% Small Group Activities, 10% Student Presentation.

**Grading:** 75% reports/papers, 5% attendance, 10% in-class presentation, 10% class participation.

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**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:** Garner, Shirley Nelson

**Description:** Plays from all of Shakespeare's periods, chosen from among A Midsummer Night's Dream, Hamlet, the history plays, Measure for Measure, Twelfth Night, King Lear, Othello, Antony and Cleopatra, and The Tempest., Class time: 15% lecture, 85% discussion. Work load: Read 8 plays, write 2 two-page papers, and 1 8 - 10 page paper; participate in a group project. Grade: 80% written work; 20% class participation.

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**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:** Sisneros, Katie S

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

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**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:** Apolloni, Jessica

**Description:** This course examines the major plays of Shakespeare with particular attention to Renaissance criminality. From street cons to high treason, Shakespeare stages a wide variety of transgressions against the law, often questioning what is considered "criminal" in the first place. In addition to our analysis of political and social conflict in the plays, we will work through numerous critical approaches such as gender studies, nation building, and reception history. We will begin the course with three plays centered on crimes of the court: Macbeth, Richard II, and 1 Henry IV. We then move to plays that approach community tensions, including: Measure for Measure, Merchant of Venice, and Othello. We will conclude with Shakespeare's the Tempest, a play steeped in cross-community violence. While one goal of the course is to better understand the historical context that surrounds these plays, there will also be a significant emphasis on the continued impact of Shakespeare in today's world.

**Style:** 25% Lecture, 5% Film/Video, 70% Discussion.

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**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:** Baehler, Patricia 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 information. Whether you love him, hate him, or can't get enthused either way, William Shakespeare is the single most important figure in English literature. His plays continue to be relevant 500 years after they were written, and he has contributed more words and phrases to our language than anyone else. From poetry to performance to social perspective, our course will look at a number of important elements of Shakespeare's work while helping you develop your skills in literary analysis and critical thinking.

**Style:** Online

**Grading:** See attached syllabus

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**EngL 3020H Honors: Studies in Narrative: Masters of Modernism**

A-F only, 3 credit(s); honors student Credit will not be granted if credit has been received for: ENGL 3020;
Instructor: Fitzgerald, M. J
Description: In this class we will be studying three "classic" modernist novels, Joyce's Portrait of the Artist as a Young Man, Woolf's To the Lighthouse, Faulkner's The Sound and The Fury, and pairing them with three more contemporary modernist novels: Alice Munro's The Beggar Maid, Toni Morrison's Beloved and WG Sebold's The Emigrants.

EngL 3022 Science Fiction and Fantasy
3 credit(s);
Instructor: Taylor, Amanda D
Description: Student may contact the instructor or department for information.

EngL 3024 The Graphic Novel
3 credit(s);
Instructor: Phillips, Michael A
Description: Student may contact the instructor or department for information.

EngL 3027W The Essay
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Kinter, Priscilla Lee
Description: This is a course for students ready to face more challenging assignments and deepen their comfort and skill with writing. We will explore creative stylistic choices in assignments and exercises that will include memoir, critical comparisons, analyses, persuasive essays, etc. You will learn to generate topics (analytical and creative), develop essays from those topics, work independently of strict guidelines, and work in small groups to improve each other's writing. You will also learn to write for multiple audiences, both academic and non-academic, and how to make appropriate decisions about content, rhetoric, language, structure, vocabulary, style, and format. Creative nonfiction assignments will teach you to incorporate complex description, analysis, and personal feelings and points of view tempered by objectivity, while identifying and analyzing conventions and styles of creative nonfiction and experimenting with new and more sophisticated writing strategies and styles. The course will introduce you to the basics of good prose writing: the use of original detail, sound and rhythm, image and metaphor, character development and dialogue, voice, point of view, and narrative shape and form. Additionally, we will look at the challenges and opportunities particular to writing nonfiction. The cornerstones of our work will be to develop your ability to 1) describe the world around you, 2) access your memory for material, 3) do the research you need to do to make your work as full as possible, and 4) use your imagination to fill in what you cannot know. This course will encourage you to draw material from your inner world, but also to develop your engagement as a writer within the larger world. This is a writing intensive course. There will be reading and/or writing assignments for every class. As the semester progresses, you will develop longer essays as well as shorter pieces. These assignments will emphasize the entire writing process and push you to revise further than you might usually do, on the principle that 90% of the work of writing is not generation, but revision, revision, and more revision; writing, by its very nature, is time-consuming, for beginners and veterans alike. Think of this like a photography course: enjoyable, rewarding, and inspiring, but also requiring long hours in the darkroom trying to get your prints just right. This is primarily a discussion (as opposed to lecture) course. Much of our class time will be spent in "workshop" mode, in small or large groups, discussing the readings and sharing and critiquing one another's work. Participation of all members of the class is critical. Every student should participate at least once during each class meeting, and all students should be prepared to read from their work in class from time to time
Style: 30% Lecture, 50% Discussion, 20% Small Group Activities. 1 field trip, as part of an extended writing exercise, is possible. There will be short videos incorporated when appropriate.
Grading: 50% reports/papers, 15% written homework, 15% journal, 20% class participation. Written Homework and the Journal are combined into one category (equaling 30% of the grade) that covers in-class writing exercises, homework, and small-group creative work.

EngL 3027W The Essay
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Todd, Kimberley Felicia
Description: Student may contact the instructor or department for information.

EngL 3030 Studies in Drama: Early Modern Drama
3 credit(s), max credits 9, 3 completions allowed; Credit will not be granted if credit has been received for: ENGL 5030;
Instructor: Haley, David B
Description: In England, the "Early Modern" era—a rubric embracing three centuries of European history from the Reformation to the French Revolution—was split in two by a kingless "Interregnum" (1642-1660) of Civil Wars and republican government. English drama from before the Interregnum is loosely called "Elizabethan" and includes plays written by Marlowe, Shakespeare, Jonson, Middleton, Webster, Fletcher, Ford, and Brome to entertain middle- and upper-class audiences who were used to watching performances in an open-roofed theater. Starting from the Restoration of monarchy in 1660, plays were performed for the next 140 years on a candle-lit, boxed-in stage that now featured actresses
The American Food Revolution in Literature and Television

EngL 3071 The American Food Revolution in Literature and Television

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 t.v. In the mean time the environmental movement was sending its own shockwaves through American consciousness of food production and consumption. The joining together of these movements--cultural 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: Progress and Madness: Lit, Science, and Technology
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Kamerbeek, Chris
Description: This course explores the conflicts and conversations that occur at the frontiers of scientific thinking and technological innovation by examining select literary and cinematic texts from a variety of historical moments and points of view. We will consider the ambivalence and anxiety that attend progress via topics such as electricity, telegraphy, photography, the railroad, the cinema, Fordism, the atomic bomb, genetic engineering, and the Internet. We will also track the archetype of the "mad scientist," whose dangerous knowledge and often-fatal hubris typically turn a tale cautionary. Course authors may include Mary Shelley, Henry David Thoreau, H.G. Wells, Jorge Luis Borges, Marguerite Duras, Kurt Vonnegut, William Gibson, Italo Calvino, Kazuo Ishiguro, Jennifer Egan, and Gary Shteyngart. Films may include Modern Times, 2001, Blade Runner, Eternal Sunshine of the Spotless Mind, and Wall-E.

EngL 3090 General Topics: The Original Walking Dead in Victorian England
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Tandy-Treiber, Ann Marie
Description: Scientific knowledge about the human body and the process of death expanded hugely in the 19th Century, at the same time that increases in urban populations in England gave rise to the problem of what to do with all the bodies. Concurrently, English explorers in other parts of the world were finding evidence of "buried" civilizations, and construction workers for the Thames Embankment and the London Underground were digging through London's own buried past. Death--and in particular the dead body--became a nexus of anxiety: individual, social, scientific, and historical. In this course, we will trace a number of Victorian responses to these new kinds of knowledge: spiritualism, funeral practices, fears of premature burial, cremation, vampirism, armchair anthropology, and speculative fiction about England's own future. Readings will include Frankenstein, Dracula, and others.

EngL 3102 Chaucer
A-F only, 3 credit(s);
Instructor: Scheil, Andrew
Description: This course surveys the major works of the late medieval author Geoffrey Chaucer. The vitality of Chaucer's poetry has spoken powerfully to every generation of English readers since the fourteenth century. Perhaps best known as one of the finest comic authors in English, Chaucer was not only a great writer of satire and comedy, but also composed wonderful examples of almost all the major medieval genres: romances of chivalry and courtly love, epic, pious tales of saints and sinners, philosophy, lyric poems, sermons and tales of far-away places. Since Chaucer's work ranged so broadly, the class will not only be an in-depth study of one immensely talented and influential author, but also an introduction to medieval culture. One cannot read all of Chaucer's works in one semester; we will concentrate on his great epic of betrayed love set in the Trojan War (Troilus and Criseyde) and substantial selections from his final masterpiece, The Canterbury Tales. We will read all of these works in Middle English, the variety of English written and spoken circa. 1100-1500. Middle English seems hard at first, but (with guidance) students quickly become used to it. The course will also, therefore, function as a partial introduction to the history of the English language.
Style: 50% Lecture, 50% Discussion.

EngL 3110 Medieval Literatures and Cultures: Intro to Medieval Studies: Dreams and Middle English Dream Visions
3 credit(s), max credits 9, 3 completions allowed; Credit will not be granted if credit has been received for: ENGL 5110;
Instructor: Krug, Rebecca L
Description: Like many people alive today, medieval writers were fascinated with dreams. This course is an introduction to the literary genre known as the "dream vision" and to historical and theoretical discussions of dreams. We concentrate on four late medieval dream visions: Langland's Piers Plowman; Chaucer's Book of the Duchess and House of Fame; and the Gawain-Poet's Pearl. Students need not have taken a course in Middle English literature (we read the most difficult texts in parallel text editions--facing Modern English/Middle English pages) and will learn to read and pronounce Middle English over the course of the semester.
Style: 10% Lecture, 90% Discussion.
EngL 3122 Shakespeare II: The Major Themes
3 credit(s);
Instructor: Clayton, Tom
Description: This is a course in Intensive Shakespeare concentrating on three tragedies, including two of his greatest, Antony and Cleopatra and Coriolanus, and Timon of Athens; and the first of his Romances, Pericles, Prince of Tyre. All were written in 1606-08, and set in classical antiquity, a time and space of great moment in history, and stimulus and scope for the creative imagination then and since. In Shakespearean Tragedy, A. C. Bradley invented the Big Four tragedies conventionally regarded as his greatest, Hamlet, Othello, King Lear, and Macbeth, and few dispute their greatness. But Greco-Roman classical antiquity seems to have freed Shakespeare from the providential order of his English History Plays, his comedies and romances, and his other tragedies, and invited him to see human nature, society, and the individual in a somewhat different perspective. It also prompted him to write the three tragedies that are in many ways his most powerful and challenging. They were written at the height of his expressive powers to probe sociopolitical, psychological, and spiritual realities in ways and connections he had not earlier attempted so intensively if at all. For these Shakespeare took his plots and more from Parallel Lives of the Greeks and Romans by the ancient moral philosopher and biographer Plutarch as translated into English by Sir Thomas North from Jacques Amyot's French translation from the Greek. The fourth play, Pericles, was written close in time to the others but is very different in kind, tone, and attitude, and a singular instance of what else can be done in imaginative engagement with classical antiquity besides what he did in the three tragedies. Shakespeare cannot have read Aristotle's Poetics, but that doesn't mean you shouldn't. The work has as much application to Shakespeare?ts tragedies as to those Aristotle knew, perhaps more, and it will play a part in the course. But the emphasis will be on what Shakespeare wrote and how that means and was designed to affect audiences. I look forward to teaching these plays as always and accordingly do not look forward to teaching them?or you?for the last time, but that?ts the way it is.

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.

EngL 3151H Romantic Literatures and Cultures
A-F only, 3 credit(s);
Instructor: Goldberg, Brian B
Description: This class will survey some of the literary highlights of the Romantic period of British literature (1789-1832, or thereabouts). 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, two writing assignments (7-10 pages or 30-50 lines of poetry each), and a series of in-class writing assignments. Students with further questions are invited to contact the instructor.

EngL 3161 Victorian Literatures and Cultures
3 credit(s); Credit will not be granted if credit has been received for: ENGL 3161H;
Instructor: Elfleinbein, Andrew
Description: Student may contact the instructor or department for information.

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.

**EngL 3221 American Novel to 1900**
- **3 credit(s);**
- **Instructor:** STAFF
- **Description:**

**EngL 3301 Asian America Through Arts and Culture**
- **3 credit(s);** Credit will not be granted if credit has been received for: AAS 3301; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
- **Instructor:** Lee, Josephine D
- **Description:** Through the analysis of theater, dance, music, visual arts, and other artistic practices, Asian American Through Arts and Culture increases awareness of the artistic contributions as well as the history, politics, and culture of Asian Americans. This semester we will focus on the close analysis and interpretation of individual plays by a range of modern and contemporary artists. Students will analyze, critique, and interpret Asian American drama and theater in light of the historical and social contexts in which they were produced, their creation and uses of aesthetic form, and their impact on individuals and communities. Discussion, writing assignments, and oral presentations will focus on different ways of encountering and evaluating plays; for instance, students will write critical analyses and production reviews. We will examine what it means to define artists and their work as being “Asian American” and explore how other categories of identity such as gender, sexuality, or class intersect with race. We will study how art works not only as individual creativity but also as communal and social practice; for instance, we look at the history of theaters, such as East-West Players or Pan Asian Repertory Theatre, that have sustained Asian Americans as actors, playwrights, and designers.
- **Style:** 25% Lecture, 5% Film/Video, 50% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.
- **Grading:** 75% reports/papers, 25% attendance.

**EngL 3501 Public Discourse: Coming to Terms With the Environment**
- **3 credit(s);** Meets CLE req of Environment; meets CLE req of Literature
- **Instructor:** St Lawrence, Robert N
- **Description:** This course will consider three environmental issues (climate change, environmental toxicity, and the loss of biodiversity) and some of the many ways that these issues make their way into our public sphere. By examining a variety of genres (including novels, creative non-fiction, poetry, documentary film, feature journalism, editorial writing, literary or cultural criticism, as well as other representational modes), we will work together to analyze the way that literary form and content come together toward producing social action. This means that over the course of the semester, students will become familiar with both the construction of discourses about “the environment” and the actual events and materials that call upon these discourses. Students will also be encouraged to practice what we study, writing ~2000 words with an eye toward publication and public participation in addition to ~3000 words of more conventional academic analysis (not including brief informal writings) over the course of the semester. We will share our work. Readings will amount to ~100pp/week on average, with some weeks more ambitious than others.

**EngL 3505 Community Learning Internships I**
- **A-F only, 3 credit(s);**
- **Instructor:** Daigre, Eric Stephen
- **Description:** This is the first of a two-semester course integrating community-based learning with academic analysis. Students in this course will be expected to take English 3506 in the spring. The course examines the politics of literacy and education in the U.S. Students will tutor, teach, or classroom assist 3-4 hours per week at a local organization (K-12 or adult education / English Language Learning). All the while, we will read and discuss literacy, educational, and cultural theory as we do exciting projects and assignments that connect these theories to what we're learning in our community-based practices. Class formats are discussion-based. Assignments include several short reflection papers, two academic papers, and class presentations. Think you might want to teach or work at a nonprofit after graduating? This is the course for you.

**EngL 3507W Introduction to Chicana/o Literature**
- **3 credit(s);** Credit will not be granted if credit has been received for: CHIC 3507W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
- **Instructor:** Estrada-Perez, Jesus O.
- **Description:** Student may contact the instructor or department for information.
EngL 3507W Introduction to Chicana/o Literature
3 credit(s); Credit will not be granted if credit has been received for: CHIC 3507W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Covarrubias, Alexandra Mendoza
Description: Student may contact the instructor or department for information.

EngL 3597W Introduction to African American Literature and Culture I
4 credit(s); Credit will not be granted if credit already received for: AFRO 3591W; Credit will not be granted if credit has been received for: AFRO 3597W; Meets CLE req of 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

EngL 3601 Analysis of the English Language
4 credit(s);
Instructor: Elfenbein, Andrew
Description: A 4-part introduction to the analysis of the English language: (1) basics (phonetics, morphology, syntax, semantics); (2) sociolinguistic and psycholinguistic approaches to English; (3) overview of the history of English; (4) literary stylistics.
Style: 60% Lecture, 10% Discussion, 10% Small Group Activities, 20% Demonstration.
Grading: 15% mid exam, 20% final exam, 25% quizzes, 30% written homework, 5% attendance, 5% class participation.

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 Diversity and Soc Justice US
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 programs). 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 Diversity and Soc Justice US  
Instructor: Brennan, Laura Bassett  
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: EngL 3883V is a workshop that supports students writing Honors theses in the Department of English. While most thesis writing will be done under the direction of your thesis advisor and committee, EngL 3883V provides an overview of the writing and research process, a supportive community of fellow writers, and a structure to help students complete this large-scale, long-term, in-depth project—whether the thesis involves literary analysis or creative writing. The course is designed around the three stages of the thesis-writing process: (1) choosing a topic and formulating a research question and/or creative approach, (2) conducting primary and secondary research and/or developing plot, characters, and themes, and (3) producing a written document that answers your question by drawing on your research and/or expresses your creative vision. In general, the Fall semester focuses on questions of method and craft, research and development, and writing as a means of discovery, while the Spring semester is devoted to workshopping drafts, solving problems, and creating a coherent and elegant final product.

EngL 3960W Senior Seminar: Jane Austen, Charles Dickens, George Eliot  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Hirsch, Gordon D  
Description: In this course we will study at least two works by each of three major 19th-century British novelists: Jane Austen, Charles Dickens, and George Eliot (the pseudonym for Mary Ann Evans). Their works tend to be realist novels and to deal with such topics as social class, social criticism, the arrival of industrialization and modern science, the situation of women, political change, etc. Assignments will consist of approximately three short papers, plus a term paper or senior project (including a revision thereof). Students will assist other students by reading and commenting on one another's papers. Clear, grammatical, and carefully edited writing is expected on all assignments. The course will be conducted in the style of a seminar: students will give two or three brief oral reports during the term, and class participation is a requirement. Because 19th-century novels tend to be lengthy and challenging, students are advised to begin their course reading over the summer. Reading lists will be e-mailed to enrolled students in June.

EngL 3960W Senior Seminar: Nuclear/Family-American 1950s in Technicolor  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Rabinowitz, Paula  
Description: Cold War Dads, Martian invaders, Commie Moms, paranoia in movies, paperbacks, television, art, and music. In the shadow of nuclear war, domesticity as a middle-class value reemerged after the unprecedented entry of women into higher education (during the 1930s) and the labor force (during the 1940s). This course looks at popular culture, scientific and policy papers, abstract expressionism, postwar literature, and sociology to discern the threads connecting the threat of nuclear annihilation to the resuscitation of the nuclear family. Much of the material will be from the immediate postwar period, but we will also look at the aftermath of Hiroshima and Nagasaki in works by Douglas Sirk, Nicholas Ray, Ida Lupino, Sam Fuller, Kenneth Anger (among other filmmakers), Allen Ginsburg, Gwendolyn Brooks, Joy Kagawa, Meyer Levin, J. G. Ballard, Leslie Marmon Silko (among other writers), Lee Krasner, Willem De Kooning, Arshile Gorky, Jackson Pollock (among other painters), as well as handbooks and popular publications on home economics, nuclear war, and atomic bomb survival. Manga? Barefoot Gen? histories and memoirs of the Cold War and nuclear war and other sources will also serve as guidebooks for this exploration of the aesthetics of apocalypse and shelter.

EngL 3960W Senior Seminar: "Girls on the Run" or The Female Picaresque  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Cucullu, Lois B  
Description: This class takes as its focus narratives of the picaresque. While the picaresque is celebrated for its long and distinguished masculine lineage (Don Quixote, Tom Jones, Huck Finn, Holden Caulfield), no less rich is the female tradition. This seminar considers the figure of the picara across several genres and media: from its novelistic roots in Moll Flanders to its cinematic guise in Thelma & Louise; from such liberation narratives as Harriet Jacobs' Incidents in the Life of a Slave Girl to Nella Larsen's 1920s novella of stymied emancipation Quicksand; from the American Western genre of Charles Portis's True Grit to Kelly Reichardt's contemporary film of flight Wendy and Lucy. To cap off the seminar, we will consider Billy Wilder's topsy-turvy comedy of male flight in female dress Some Like it Hot.

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 4003 History of Literary Theory
A-F only, 3 credit(s);
Instructor: Farber,Lianna
Description: This course explores some of the major questions about literary theory that preoccupied important thinkers from antiquity through modernism by looking at how they posed and answered questions about language (how words mean), audience (to whom they mean) and the literary (how literary writing differs from other forms of writing). We will begin by examining how theorists thought that words bear meaning: when, for example, can words carry more than their literal meaning? Must they always carry more than their literal meaning? If and when they do carry "extra" meaning, how do we know what to understand? Next, we will look to questions of audience: who is the implied audience for literature? Is the implied audience necessarily male? Is the audience's understanding of a work of literature the same as the author's? how can the author manipulate understanding? What is the relationship between literature and rhetoric? Finally, we will explore these theorists' understanding of what literature is and how it differs from other kinds of writing. Readings will include works by Plato, Aristotle, Augustine, Christine de Pizan, Dante, Sidney, Behn, Wordsworth, Coleridge, Shelley, and Woolf.
Style: 25% Lecture, 75% Discussion.

EngL 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 5150 Readings in 19th-Century Literature and Culture: Digital Perspectives
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Hancher,Michael
Description: In recent years new digital tools for access and analysis have broadened and refined the scholarly study of nineteenth-century literature and culture. This course will survey achievements that have already been realized, assess their limitations, and explore possibilities for new ventures in the field. Representative authors and archives include Bentham, Blake, Austen, Babbage, Dickens, Braddon, Rossetti, and Doyle; Parliamentary Papers, the Times and other British newspapers, Ackermann's Repository of Arts, the Illustrated London News, the London Journal, the Strand; BRANCH (Britain, Representation, and Nineteenth-Century History), Google Books, HathiTrust, Google Art Project, British Library Photostream, Your Paintings, UK Reading Experience Database, and NINES (Nineteenth-Century Scholarship Online). Secondary readings will include works by Brake, Cohen, Flanders, Fyfe, Houston, Jockers, Landow, Leary, Liddle, McGann, Moretti, Mussell, and Stauffer.

EngL 5510 Readings in Criticism and Theory: Postcoloniality and Literary Theory
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Ismail, Qadri M
Description: This course is an introduction to poststructuralism, from the perspective of postcoloniality. It understands poststructuralism as the critique of the modern episteme and so will read some modern writers (Hobbes, Shelley, Austin) apart from Derrida, Barthes and Althusser. Additionally, we will read other critics of modernity (Foucault, Lyotard) to appreciate the stakes of their difference from poststructuralism. The postcolonialists will include Spivak and Chatterjee.

EngL 5510 Readings in Criticism and Theory: Authors and Their Critics
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Brennan, Timothy Andres
Description: There are a number of examples in literary criticism in which a critic gets so deeply into an author that the result is a collaboration, and the work of art and the art of criticism are mutually displayed in a reading of each. At times a
critic, in other words, interpreting a novel or poem, composes a work that rivals its object. The critical work may even be longer, or have taken more time to write, than the work of art itself. How often do we study this relationship? What can we learn about the art of literary criticism by examining in depth, and at length, the original work of art alongside its critical response, often itself a tour de force? The idea is to explore the art of criticism at its limits, pairing single works with single works of criticism of single works. I am drawn to those cases where critics have written long and involved books, not just on single authors, but on a single work by one author. To pore over them alongside the work itself is to learn the art of criticism and fiction at once. A possible reading list pairings includes Pierre Bourdieu's The Rules of Art and Gustave Flaubert's Sentimental Education; Roberto Schwarz's Master on the Periphery of Capitalism and Machado de Assis, The Posthumous Memoirs of Bras Cubas; Walter Ben Michaels' The Gold Standard and the Logic of Naturalism and Theodore Dreiser's Sister Carry; Fredric Jameson's Brecht and Method and Bertolt Brecht's The Caucasian Chalk Circle; Barbara Herrnstein Smith's Contingencies of Value and a selection of Shakespeare's sonnets; Jean Franco's The Dialectics of Poetry and Silence and Cesar Vallejo, Poemas Humanos. Requirements: One short theme essay, and a final essay of 15-20 pages.

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: Kinter, Priscilla Lee
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: 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
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Sugnet, Charles J
Description: Student may contact the instructor or department for information.
EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Hancher, Michael
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Lee, Josephine D
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Elfenbein, Andrew
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Schumacher, Julie
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: 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: 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
EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Philippon, Daniel 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: Scandura, Jani
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Cucullu, Lois B
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Craig, Siobhan S
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Krug, Rebecca L
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Goldberg, Brian B
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Farber, Lianna
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: 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
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Scheil, Katherine West
Description: Student may contact the instructor or department for information.
EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Matar, Nabil I
Description: Student may contact the instructor or department for information.

EngL 5992 Directed Readings, Study, or Research
1-3 credit(s), max credits 45, 15 completions allowed;
Instructor: Campion, Peter
Description: Student may contact the instructor or department for information.

EngL 8090 Seminar in Special Subjects: The Animal
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Brown, Tony C.
Description: The Animal The animal has recently become subject to much scholarly and theoretical attention. Our focus will be two-fold. First, we will read the major recent works on the topic (above all Derrida, but also Agamben, Simondon, and others). Second, we will take a long view of attempts to think the non-human animal (Aristotle through Montaigne, Descartes through Kant, Hegel through Heidegger). The course will provide students the opportunity to write a substantial research paper on a topic of marked and increasing scholarly consideration, and it will be of particular interest to students of critical theory, philosophy and anthropology.

EngL 8520 Seminar: Cultural Theory and Practice: Science & Scientism in the Humanities
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Brennan, Timothy Andres
Description: This course will question the effects of the "sciences" on the humanities, especially recently, but also historically. We will study the public and media devaluation of the humanities, the deference to the sciences, and the assumption that there is nothing uniquely "scientific" about the humanities themselves. Also, and more significantly, we will explore tendency by humanists (literary critics, artists, philosophers and social theorists) to defer to the claims of science: its evidentiary models, its futurisms, its speculative "materialism." We will be interested as well in counter-trends: the critique of "scientism," for example; resistance to technological or instrumental reason, to a pure productivity without negation, to the death of the subject, and the rhetoric of "being," which is so widespread today. We will discuss the many forms of scientism in the humanities today: "thing" theory, posthumanism, ecocriticism, speculative realism; object-oriented philosophy, the neo-positivism of "distant reading," and the digital humanities. If Julien de la Mettrie in 18th-century France, regarded man as a self-moving machine, the Italian philosopher Gianni Vattimo, calls for "strip[ping] the human sciences of any hermeneutic privilege and assign[ing] the position of chief importance to technoscience, the history of which he equates with Being." Scientism, in short, has a long history. But there is another side of the coin. The sciences are more and more reliant on ideas taken from the humanities without acknowledgement, the "Big Bang," for example; "the God particle." The infiltration of the sciences by the humanities (again, without acknowledgement) can be seen in many of the most celebrated theorists of science in practice: viz, Ian Hacking (Historical Ontology and The Emergence of Probability) and Paul Feyerabend, Against Method. We will assess these trends, explore what is methodologically unique to the humanities, weigh the meaning of the word "materialist," discuss the politics of scientism, and think about the reasons for its current prominence. Readings will be from several genres: novels, criticism, manifestoes. Some possible readings include: Max Horkheimer, Paul Feyerabend, Gilles Deleuze, Ian Hacking, Ludwig Wittgenstein, Bruno Latour, Katherine Hayles, Henri Atlan, Curtis White, Leon Wieseltier, Stanislaw Lem, Carl Popper, Jane Bennett, and others. Requirements: one or two in-class presentations, a mid-term essay prospectus, and a final essay of 15-25 pages.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Clayton, Tom
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Wright, John S
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: 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
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: 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: 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: Brennan, Timothy Andres
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Philippon, Daniel 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: Scandura, Jani
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Cucullu, Lois B
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Craig, Siobhan S
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Krug, Rebecca L
Description: Student may contact the instructor or department for information.

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

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Brown, Tony C.
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Scheil, Andrew
Description: Student may contact the instructor or department for information.
EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Scheil, Katherine West
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Matar, Nabil I
Description: Student may contact the instructor or department for information.

EngL 8992 Directed Reading in Language, Literature, Culture, Rhetoric, Composition, or Creative Writing
1-9 credit(s), max credits 15, 15 completions allowed;
Instructor: Campion, Peter
Description: Student may contact the instructor or department for information.

English: Creative Writing 222 Lind Hall

EngW 1101W Introduction to Creative Writing
OPT No Aud, 4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Hwang, Su
Description: Student may contact the instructor or department for information.

EngW 1102 Fiction Writing (Intro)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Introductory course in the art and craft of reading and writing fiction. Students will read a variety of classic and contemporary fiction. Students will be responsible for composing original stories; writing comments on student work; workshop participation; attendance at a literary reading; and a final portfolio of fiction.
Style: 25% Lecture, 50% Discussion.
Exam Format: Revised stories/Final Portfolio

EngW 1103 Poetry Writing (Intro)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Introductory course in the art and craft of reading and writing poetry. Students will read and analyze contemporary and classic works of poetry while also constructing and revising their own poetry. Students will be responsible for crafting original poetry; commenting on student work; workshop participation; attendance at a literary reading; short presentations and/or papers; a final portfolio of poetry.
Style: 25% Lecture, 50% Discussion. workshop
Exam Format: Revised poems/final portfolio

EngW 1104 Journal, Essay, Memoir Writing (Introduction)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Introductory course in the art and craft of reading and writing literary nonfiction. Students will read and analyze contemporary and classic nonfiction literary works (essays, memoir, biography, autobiography, short-shorts) and also construct and revise their own nonfiction pieces. Students will be responsible for crafting original works of nonfiction; commenting on student work; workshop participation; attendance at a literary reading; short papers and/or presentations; a final portfolio of nonfiction.
Style: 50% Discussion, 50% Laboratory. workshop
Exam Format: Revised nonfiction/final portfolio of nonfiction

EngW 3102 Fiction Writing (Intermediate)
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: Intermediate course in the art and craft of reading/writing fiction for students with previous experience in fiction writing. Students will read and analyze contemporary and classic short fiction and also construct their own stories. Students will be responsible for written comments on student work; workshop participation; attendance at a literary reading; some short papers and presentations; and a final portfolio of short fiction.
Style: 25% Lecture, 50% Discussion. workshop
Grading: Revised fiction/final portfolio of fiction
EngW 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 poetry

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: Minnesota Memoirists  
OPT No Aud, 3 credit(s), max credits 9, 3 completions allowed;  
Instructor: Sprengnether, Madelon M  
Description: This course examines 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). We will read writers such as Tim O’Brien, Cheryl Strayed, Kao Kalia Yang, and others. Studying Minnesota memoirists also offers the opportunity to meet some of them in person and to pose questions about the book of theirs that we have read, as well as to hear them describe 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. Class time will be spent on reading and discussion until mid-November. After that, we will read and consider the writing that you bring to class—in a workshop style format. There are no formal examinations for this course. Your grade will be determined by three factors: attendance 25%; participation in class discussion 25%; written work 50%.

EngW 3960W Writing Workshop for Majors  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Todd, Kimberley Felicia  
Description: Student may contact the instructor or department for information.

EngW 5102 Advanced Fiction Writing  
OPT No Aud, 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  
OPT No Aud, 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  
OPT No Aud, 4 credit(s), max credits 8;  
Instructor: STAFF  
Description: Students will write and critique original works of creative nonfiction. Students will be expected to write short critiques; short reports on assigned reading material; final portfolio for revise creative nonfiction.

EngW 5205 Screenwriting
EngW 5310 Reading as Writers: First Person Singular
OPT No Aud, 4 credit(s), max credits 8;
Instructor: Hampl, Patricia
Description: How to get the "me" out of memoir, or how to get the first person voice into essay and research nonfiction. These are flip sides of the same coin, the vexed but alluring aspect of the first person narrative voice. During this semester we will read work in all three genres employing the first person voice, poetry, fiction, various forms of nonfiction. While we will seriously consider examples from poetry and fiction, the heaviest concentration of readings will be nonfiction, usually 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"? How does this constructed self claim veracity?) We will attempt to look at our subject dynamically in an effort to take us beyond the narrow confines so often assumed about the first person pronoun. Can the first person represent more than one point of view? How does the first person narrator achieve detachment? Is the first person the voice of feeling or of thought? This is a reading course, not a writing workshop. There will, however, be opportunities for brief writing exercises, usually in the form of "prompts" taken from our reading and sometimes brief personal essays related to specific readings. It is expected that you will write brief (1-page) weekly annotations of the readings, but only one formal piece of 4 pages will be required toward the end of the semester. The focus is on intensive, close reading. Readings will include at least one novel, a selection of short stories, book-length memoirs and short form essays, as well as an array of poetry, some journalism. Some of the readings will be from "canonical" texts, but our focus will take us principally to contemporary writers in an effort to hear the first person as a leading voice of our own age. Likely readings (the syllabus is still a work in progress) include poets such as Elizabeth Bishop and CK Williams, a novel by William Trevor, memoirs by Michael Ondaatje and D.J. Waldie, and essays galore. Shorter pieces will be collected in a course packet.

EngW 8101 Reading Across Genres
OPT No Aud, 4 credit(s);
Instructor: Schumacher, Julie
Description: Student may contact the instructor or department for information.

EngW 8170 MFA Practicum: EngW 1101W
S-N only, 3 credit(s);
Instructor: Gonzalez, Ramon
Description: Student may contact the instructor or department for information.

EngW 8180 Thesis Seminar: Multi-Genre
A-F only, 4 credit(s);
Instructor: Campion, Peter
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.

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**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!

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**Ent 3925 Insects, Aquatic Habitats, and Pollution**  
**A-F only, 3 credit(s);**  
**Instructor:** Ferrington Jr, Leonard Charles  
**Description:** Student may contact the instructor or department for information.

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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 5021 Insect Biodiversity and Evolution**  
**4 credit(s);**  
**Instructor:** Holzenthal, Ralph W  
**Description:** Insects are the most diverse group of organisms on Earth with almost 1 million described species. Millions more remain to be described, especially in tropical regions of the world. Insects come in a remarkable array of sizes, colors, and shapes. Taxonomists use this morphological complexity as the primary means of identifying insects, but also for inferring evolutionary relationships. In this course, we will learn how to identify insects, explore methods of collection and curation of insects, discuss their evolutionary relationships, see how insects fit in the natural world, and discuss exciting new efforts to inventory and conserve the remarkable diversity of insects. Text books: Grimaldi, D., and M.S. Engel. 2005. Evolution of Insects. Cambridge University Press. New York. 755 pp. Borror, D.J., and R.E. White. 1970. A Field Guide to the Insects. Peterson Field Guide Series. Houghton Mifflin Co. New York. 404 pp.  
**Style:** 50% Lecture, 50% Laboratory.  
**Grading:** 25% mid exam, 25% final exam, 50% quizzes.  
**Exam Format:** Essay
Ent 5041 Insect Ecology
3 credit(s);
Instructor: Prescott,Kristina
Description: Student may contact the instructor or department for information.

Ent 5081 Insects, Aquatic Habitats, and Pollution
A-F only, 3 credit(s);
Instructor: Ferrington Jr,Leonard Charles
Description: This course will focus on the effects differing classes of pollutants have on the biology, ecology and community structure of insects that are aquatic. It is intended for (1) upper level undergraduates with interests in ecology, limnology, natural resources management or conservation, and (2) first-year graduate students involved in research projects in Entomology, Water Resources, Fisheries and Wildlife, Conservation and/or Ecology and Evolutionary Biology. Topics to be covered will begin with a basic introduction to groups of insects that are aquatic and concepts related to their life-cycle dynamics, trophic guilds and community structure. Coverage will be given to hypotheses that attempt to explain community structure in both lotic (streams, rivers) and lentic (ponds, lake, reservoirs) settings. These lectures will be followed by lectures on organic pollution/eutrophication, heavy metal pollution, runoff and siltation, acidification, and thermal pollution. Changes in aquatic insect community structure will be discussed after reading an original literature source for each class of pollutant. Concluding lectures will deal with designing and maintaining biological monitoring networks to aid in decisions for water quality management. Copies of original data will be provided and hands-on, computer-based analyses of the data will give students experience in manipulating data and interpreting results. Weekly assignments will be based on data provided.
Style: 75% Lecture, 25% Discussion.
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 25% class participation.
Exam Format: Combination of multiple choice and essay

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.
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 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 5920 Special Lectures in Entomology
2-4 credit(s), max credits 12, 3 completions allowed;
Instructor: STAFF
Description: Lectures or laboratories in special fields of entomological research given by a visiting scholar or regular staff member.

Ent 8300 Graduate Seminar
S-N only, 1-2 credit(s), max credits 2, 1 completion 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: Koch, Robert L
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: 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, Marla
Description: Student may contact the instructor or department for information.

Ent 8594 Research in Entomology
S-N only, 1-16 credit(s), max credits 36, 6 completions allowed;
Instructor: Hutchison, 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.
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: Fine, Alan Raymond
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.

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: Forbes, Daniel P
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
ESPM 1011 Issues in the Environment
3 credit(s);Meets CLE req of Environment
Instructor: Millet,Dylan Baird
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 algebraCredit will not be granted if credit has been received for: GEOG 1425;Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Klink,Katherine
Description: Weather is part of our everyday lives, sometimes memorably so, such as when we experience snowstorms, hurricanes, tornadoes, or heat waves. Our society also is increasingly concerned about environmental issues such as ozone depletion and climate change, which have a fundamental atmospheric component. What do we understand about how the atmosphere works? How might our own actions affect weather and climate? Our goals for this course are to: 1) learn about weather and climate, including the physical laws that govern the atmosphere, the current tools and technologies used to study the atmosphere, and to interpret weather and climate data; 2) experience and gain insight into the nature of science and scientific uncertainty; 3) become better able to evaluate critically scientific questions and claims, especially those concerning the human impacts on the atmosphere; 4) understand the limits to what we know about weather, climate, and climate change; and 5) reflect on our roles and responsibilities as agents of local and global environmental change, especially as related to the atmosphere. ? Goals 1-3 are directly related to the objectives of the Physical Science Core: to learn about key basic concepts and consequences regarding the natural laws, processes, and properties of matter and energy; to use basic research methods such as observation, hypothesis formation/testing, and/or computer simulations; understanding the limits and uncertainty associated with these methods; and to become more informed about the scientific basis of claims about climate and environmental change. ? Goals 3-5 are directly related to the objectives of the Environment Theme: to inform your understanding of the interrelationships between the non-human environment (e.g., the atmosphere) and human society; to introduce you to important underlying scientific principles within environmental issues, particularly as related to the atmosphere; to consider the possibilities and limitations of various technologies, practices, and policies aimed at adapting to, and/or mitigating, the potentially negative impacts of global climate change; and to reflect on our ethical commitments as global citizens on the issue of climate/environmental change. Questions we will try to answer include: What makes the wind blow? Why don't all clouds produce rain? What causes thunderstorms and tornadoes? How do satellites work? How does El Niño affect the weather in North America? How do you make a weather forecast? Are human activities really affecting the atmosphere? What is the greenhouse effect, and should we be concerned about it? What do we know about climate change? This course fulfills the CLE Physical Science with Lab Core, and the Environment Theme. Prerequisites: Students are expected to be familiar with pre-college algebra (at the level of the standard University entrance requirement).
Style: 60% Lecture, 10% Discussion, 30% Laboratory.
Grading: 25% final exam, 30% additional semester exams, 45% laboratory evaluation.
Exam Format: multiple choice, short answer

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
This course examines the ecology of ecosystems that are primarily composed of managed plant communities, such as managed forests, field-crop agroecosystems, rangelands and certain nature reserves, parks, and urban “open-spaces”. It is designed to serve as an introductory ecology course that focuses on scientific principles, the interrelationships between the environment and human society, and the roles of science, technology, and policy in shaping societal responses to environmental challenges within managed ecosystems. The aim of the course is to train you in concepts of ecology and ecosystem management that will provide a foundation for future work with a wide variety of human-managed ecosystems. This course will explore structure-function relations in such ecosystems, emphasizing ecosystem properties such as productivity, resource-use efficiency, nutrient cycling, and resilience. Emerging principles for design of sustainable managed ecosystems and the provision of ecological services will be examined. In addition, the societal implications of these management decisions and processes will be explored. Importantly, this course focuses on
ESPM 3245 Sustainable Land Use Planning and Policy
A-F only, 3 credit(s); Jr or sr
Credit will not be granted if credit has been received for: ESPM 5245; Meets CLE req of Environment
Instructor: Davenport, Mae Allen
Description: This course is designed to develop and refine student understanding of the principles, science and practice of sustainable land use planning and policy. Specifically, in the course students will (1) analyze interactions between the “three pillars of sustainability” in environmental planning and policy: ecology, economics, and equity, (2) identify and critically examine land use planning principles, processes and outcomes using planning case studies across the U.S., and (3) collaborate in teams on a planning sustainability assessment project. The course examines planning across local, state and federal levels at watershed, ecosystem, and landscape scales.

ESPM 3251 Natural Resources in Sustainable International Development
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 5251; Meets CLE req of Global Perspectives
Instructor: Current, Dean Alan
Description: International perspectives on resource use in developing countries. Integration of natural resource issues with social, economic, and policy considerations. Overviews of agriculture, forestry, agroforestry, non-timber forest products, water resources, certification, and development issues. Latin American focus but also includes case studies from other developing regions of the world.
Style: 40% Lecture, 25% Discussion, 15% Student Presentation, 20% Guest Speakers.
Grading: 35% in-class presentation, 5% class participation. 60% exams

ESPM 3261 Economics and Natural Resources Management
A-F only, 4 credit(s); MATH 1031 or MATH 1051 or MATH 1142 or MATH 1155 or MATH 1271 or ESPM 3012 or STAT 3011 or Soc 3811 or equiv
Credit will not be granted if credit has been received for: ESPM 5261; 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 management 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, fisheries, wetlands). Prerequisite math for this course is 1 semester of college algebra or statistics.
Style: 70% Lecture, 10% Discussion, 10% Small Group Activities, 10% Guest Speakers.
Grading: 32% mid exam, 16% final exam, 7% quizzes, 40% written homework, 5% attendance.
Exam Format: short answer, problems

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: Societal deliberation and decisions about environmental issues happens at multiple scales. To achieve sustainable societies, we need a better understanding about what influences these discussions and ultimately the decisions we make. As individuals our behaviors affect natural systems as well as the people who depend on them. In groups, people develop social norms and social networks that may create aggregate affects, both positive and negative, for environmental change. Structurally, our governance laws and policies establish a broader societal intent regarding what is acceptable and what environmental goals we are trying to achieve as a society. You will learn key theoretical concepts of environmental social psychology and political science. For example, you will investigate how law is developed in democratic societies and sets the course for influencing human behavior. You will examine how people respond to policies, using theoretical concepts from social psychology about attitudes, values, and social norms; applying these ideas to specific environmental problems. Finally, we will discuss the underlying ethical debates and value of getting involved in environmental change, through individual choices and civic engagement. Lectures provide the theoretical concepts and empirical studies from environmental law, political science, and social psychology. Guest speakers, class discussion, and interactive learning exercises provide an opportunity to apply the concepts to interpret concrete examples. Readings are designed to explore how social psychologists and political scientists investigate the human natural system intersect as well as present research methods used by social scientists who undertake this work. To understand the material in action, each student will develop a small research project, including question development, data collection/analysis, and written article. Who would take this course? This course is designed for ESPM students, required for all students in the Policy, Planning, Law and Society track and is a selected course for other tracks. In addition, students who are broadly interested...
in the relationship between human behaviors, law, policy, and the environment may be interested in this class, including Fisheries, Wildlife, and Conservation Biology majors or Forest and Natural Resource majors as well as other CFANS and CLA majors. How does this course fit with the Liberal Education requirements? Liberal education is designed to create a foundation of general knowledge, rational thought, and diverse intellectual capacity. This class is designed to meet the Social Science liberal education requirement of the University of Minnesota as well as the Civic Life and Ethics theme.

**Style:** 40% Lecture, 20% Discussion, 30% Small Group Activities, 10% Guest Speakers.

### 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:** ESPM 5606; Meets CLE req of Technology and Society

**Instructor:** Seavey, Robert Thomas

**Description:** Perhaps you've noticed the high tech house on campus across from the Bell Museum. Will all housing be built with similar technologies in the future? Should it? Perhaps you've been in a neighborhood and wondered whether the residents ever see each other. How do housing practices and the choices we make about housing resources affect a sense of community? And what about the new and incredibly efficient but expensive LED light bulbs: are they worth it? As population continues to grow and as environmental issues become more pressing, it has become increasingly clear that some housing practices and technologies are more sustainable than others, and in this course you will learn about the challenges and choices we all face in creating and maintaining housing. Historically, we have mostly allowed people to do what they want on their own property, and to build without much thought to how natural events impact communities, but does this freedom carry an unsustainable cost to the surrounding environment, and to our communities? Housing is a basic necessity, and the knowledge you gain in this course is something you will use for the rest of your life.

### ESPM 3603 Environmental Life Cycle Analysis

**A-F only, 3 credit(s); Credit will not be granted if credit has been received for:** MGMT 3603;

**Instructor:** Hill, Jason David

**Description:** Life cycle assessment (LCA) is a tool used in understanding the cradle-to-grave environmental impacts of products, processes, and policies. Students will learn LCA methodology, including goal and scope definition, inventory analysis, impact assessment, interpretation, and application. The course will be taught using numerous case studies. Students will have the opportunity to apply the LCA methodology they learn in lectures, discussions, and other in-class activities to the preparation of a group project on a topic of their choosing.

### ESPM 3604 Environmental Management Systems and Strategy

**A-F only, 3 credit(s); Credit will not be granted if credit has been received for:** ESPM 5604;

**Instructor:** Smith, Tim

**Description:** Environmental threats and opportunities are becoming increasingly important for business. Environmental problems such as climate change, ozone depletion and loss of biodiversity have become important national and international issues. Governments continue to adopt regulations and standards which influence industrial activity on a daily basis. Banks, insurance companies and other investors have become conscious of liabilities imposed by improper handling of materials and contamination of property. Suppliers and customers are also setting their own requirements. With the advent of the Business Charter on Sustainable Development, the European Environmental Management and Audit Scheme and the ISO series of environmental standards, companies are responding to these challenges by establishing structured environmental management systems. This course provides a theoretical and practical framework for understanding and evaluating environmental impacts within business scenarios. The course enables students to effectively assess the strategic and tactical processes associated with environmental, business and policy trends facing today's organizations.

**Style:** 60% Lecture, 20% Discussion. student presentations and group projects

**Grading:** 20% reports/papers, 40% special projects, 10% quizzes, 10% class participation, 20% other evaluation. mid-semester exam(s)

**Exam Format:** multiple choice, essay, short answers

### ESPM 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
The class will demonstrate how pollution prevention is fundamental to sustainability, resource efficiency, design-for-the-environment, product stewardship, green chemistry, and life cycle management. The course will consist of (1) instructor lectures, (2) guest speakers from industry, (3) hands-on exercises and group activities, (4) writing exercises, and (5) pollution prevention field assessment, and (6) tour of an industrial facility.

**Style:** 45% Lecture, 20% Discussion, 10% Small Group Activities, 5% Student Presentation, 5% Demonstration, 5% Field Trips, 10% Guest Speakers. Student presentations and group works

**Grading:** 30% mid exam, 20% reports/papers, 10% special projects, 20% written homework, 10% in-class presentation, 10% class participation.

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**ESPM 3612W Soil and Environmental Biology**

3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Gutknecht, Jessica Lucille Mentzer

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

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**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.

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**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.

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**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.

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**ESPM 4093 Directed Study**

1-7 credit(s), max credits 20, 20 completions allowed;

**Instructor:** Oberhauser, Karen S

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

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**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.

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**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.

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**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.

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**ESPM 4093 Directed Study**

1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Rosen, Carl Jay
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

ESPM 4093 Directed Study
1-7 credit(s), max credits 20, 20 completions allowed;
Instructor: Twine, Tracy E
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: Becker, Dennis R
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 4242 Methods for Environmental and Natural Resource Policy Analysis
A-F only, 3 credit(s); [3241 or equiv], [3261 or equiv], prereq jr or sr
Credit will not be granted if credit has been received for: ESPM 5242;
Instructor: Kilgore, Mike
Description: This course introduces students to methods and processes used to analyze environmental and natural resource policies and programs. Its emphasis is on the practical application of policy analysis to address contemporary natural resource problems, recognizing the politically-charged environment within which decisions over the use, management, and protection of these resources occurs. Specific student learning objectives of the course are to: 1) Develop an understanding of the role and responsibilities of the policy scientist/analyst in advancing knowledge and practice in environmental and natural resource decision-making. 2) Differentiate among methods used to synthesize knowledge, forecast results, assess programs, and evaluate outcomes of environmental and natural resource policies. 3) Gain an appreciation for the politics of environmental and natural resource policy analysis. 4) Be able to identify the basic components of a policy analysis study.
Style: 25% Lecture, 25% Discussion, 20% Small Group Activities, 15% Demonstration, 15% Guest Speakers.
Grading: 40% reports/papers, 40% special projects, 5% quizzes, 10% reflection paper, 5% other evaluation. Other evaluation includes 10% for presentations, and 10% for peer critiques of reports
ESPM 4295W GIS in Environmental Science and Management  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Jenks, Andrew Carl  
Description: Application of spatial data inventory/analysis in complex environmental planning problems. Spatial data collection, database development methods including GPS, DLG, TIGER, NWI data, spatial analysis. Topics often identified by non-University partners. Operational knowledge of basic GIS is required, as covered in an introductory course such as FR3131 or GEOG3561.

ESPM 4601 Soils and Pollution  
3 credit(s);  
Instructor: Nater, Ed  
Description: Student may contact the instructor or department for information.

ESPM 5061 Water Quality and Natural Resources  
3 credit(s);  
Instructor: Perry, Jim A  
Description: Review and discussion of recent literature in field complements the material covered in ESPM 4061; co-attendance is required. 4061 also addresses the science and art of water quality decision making, with a strong international focus. We discuss ecology of aquatic ecosystems, how they are valuable to society, how they are changed by landscape management, and how we make informed decisions about that management. We rely heavily on case studies, impaired waters and the TMDL process, and student engagement in simulating water quality decision making. Workload is in addition to that listed for ESPM 4061W  
Style: 10% Lecture, 60% Discussion, 30% Student Presentation.  
Grading: 20% mid exam, 20% final exam, 30% in-class presentation, 30% class participation.

ESPM 5071 Ecological Restoration  
4 credit(s);  
Instructor: Galatowitsch, Susan M  
Description: Student may contact the instructor or department for information.

ESPM 5101 Conservation of Plant Biodiversity  
A-F only, 3 credit(s); Grad student or instr consent  
Credit will not be granted if credit has been received for: ESPM 3101;  
Instructor: Pike, Carrie C  
Description: This course is designed to introduce students to concepts in biodiversity and efforts to conserve and restore biodiversity in plant populations. Topics include evolutionary forces, Endangered Species Act, species restoration, impact of harvesting forest species, intellectual property rights, invasive species, ecosystem stability and climate change among others. A combination of lectures, field trips, and discussions will be used to illustrate principles.

ESPM 5102 Managing International Natural Resources Programs and Projects: Forests, Water and Land Use  
A-F only, 3 credit(s);  
Instructor: Eckman, Karlyn  
Description: Overview  
This interdisciplinary course will be offered in the fall. It is intended for undergraduate and graduate students from all disciplines and majors with an interest in global environmental issues. We will explore the interplay of social and bio-physical processes, policies and practices occurring around the world and at multiple scales. A special concern will be rapidly developing areas in regions that coincide with biodiversity ?hotspots,? presenting opportunities and challenges for both adaptive and collaborative management and community-oriented natural resources management. Students who are considering an international internship or an international career will find this course especially useful since it presents the ?best management practices? and techniques of international organizations. The course will emphasize the development of applied skills that are important in future academic and professional careers, both domestic and international. The instructor, Karlyn Eckman, has worked in international forestry, agroforestry and watershed projects in Africa, Asia and the Caribbean for thirty years, and is Senior Research Associate in the Department of Forest Resources (http://www.forestry.umn.edu/People/KarlynEckman/index.htm). She is also a member of the graduate faculty in the Water Resources Science (WRS) and Natural Resources Science and Management (NRSM) graduate programs. Please contact the instructor (Karlyn Eckman) for more information.

ESPM 5108 Ecology of Managed Systems  
A-F only, 4 credit(s); Sr or grad student  
Credit will not be granted if credit has been received for: ESPM 3108;  
Instructor: Jordan, Nicholas Royal  
Description: This course examines the ecology of ecosystems that are primarily composed of managed plant communities, such as managed forests, field-crop agroecosystems, rangelands and certain nature reserves, parks, and urban “open-spaces?”. It is designed to serve as an introductory ecology course that focuses on scientific principles, the
interrelationships between the environment and human society, and the roles of science, technology, and policy in shaping societal responses to environmental challenges within managed ecosystems. The aim of the course is to train you in concepts of ecology and ecosystem management that will provide a foundation for future work with a wide variety of human-managed ecosystems. This course will explore structure-function relations in such ecosystems, emphasizing ecosystem properties such as productivity, resource-use efficiency, nutrient cycling, and resilience. Emerging principles for design of sustainable managed ecosystems and the provision of ecological services will be examined. In addition, the societal implications of these management decisions and processes will be explored. Importantly, this course focuses on several environmental issues of current major significance, including invasive species, air and water pollution, and global climate change.

ESPM 5242 Methods for Natural Resource and Environmental Policy
A-F only, 3 credit(s);[3241 or equiv], [3261 or equiv], [sr or grad student]Credit will not be granted if credit has been received for: ESPM 4242;
Instructor: Kilgore,Mike
Description: This course introduces students to methods and processes used to analyze environmental and natural resource policies and programs. Its emphasis is on the practical application of policy analysis to address contemporary natural resource problems, recognizing the politically-charged environment within which decisions over the use, management, and protection of these resources occurs. Specific student learning objectives of the course are to: 1) Develop an understanding of the role and responsibilities of the policy scientist/analyst in advancing knowledge and practice in environmental and natural resource decision-making. 2) Differentiate among methods used to synthesize knowledge, forecast results, assess programs, and evaluate outcomes of environmental and natural resource policies. 3) Gain an appreciation for the politics of environmental and natural resource policy analysis. 4) Be able to identify the basic components of a policy analysis study.
Style: 25% Lecture, 25% Discussion, 20% Small Group Activities, 15% Demonstration, 15% Guest Speakers.
Grading: 40% reports/papers, 40% special projects, 5% quizzes, 10% reflection paper, 5% other evaluation. Other evaluation includes 10% for presentations, and 10% for peer critiques of reports

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 consentCredit 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 management 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, fisheries, wetlands). Prerequisite math for this course is 1 semester of college algebra or statistics.
Style: 70% Lecture, 10% Small Group Activities, 10% Guest Speakers.
Grading: 26% mid exam, 13% final exam, 26% reports/papers, 32% written homework, 3% class participation.
ESPM 5295 GIS in Environmental Science and Management
A-F only, 4 credit(s);
Instructor: Jenks, Andrew Carl
Description: A 2nd course in GIS focusing on the application of spatial data inventory/analysis in complex environmental planning problems. Satisfactory completion of FR3131/5131 or equivalent is required. Spatial data collection, database development methods including GPS, DLG, TIGER, NWI data, spatial analysis. Topics identified by non-University partners.

ESPM 5402 Biometeorology
3 credit(s);
Instructor: Griffis, Timothy John
Description: Student may contact the instructor or department for information.

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: Wheeler, Daniel B
Description: Student may contact the instructor or department for information.

ESPM 5603 Environmental Life Cycle Analysis
A-F only, 3 credit(s);
Instructor: Hill, Jason David
Description: Life cycle assessment (LCA) is a tool used in understanding the cradle-to-grave environmental impacts of products, processes, and policies. Students will learn LCA methodology, including goal and scope definition, inventory analysis, impact assessment, interpretation, and application. The course will be taught using numerous case studies. Students will have the opportunity to apply the LCA methodology they learn in lectures, discussions, and other in-class activities to the preparation of a group project on a topic of their choosing.

ESPM 5604 Environmental Management Systems and Strategy
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: ESPM 3604;
Instructor: Smith, Tim
Description: Environmental threats and opportunities are becoming increasingly important for business. Environmental problems such as climate change, ozone depletion and loss of biodiversity have become important national and international issues. Governments continue to adopt regulations and standards which influence industrial activity on a daily basis. Banks, insurance companies and other investors have become conscious of liabilities imposed by improper handling of materials and contamination of property. Suppliers and customers are also setting their own requirements. With the advent of the Business Charter on Sustainable Development, the European Environmental Management and Audit Scheme and the ISO series of environmental standards, companies are responding to these challenges by establishing structured environmental management systems. This course provides a theoretical and practical framework for understanding and evaluating environmental impacts within business scenarios. The course enables students to effectively assess the strategic and tactical processes associated with environmental, business and policy trends facing today's organizations.
Style: 60% Lecture, 20% Discussion. Student presentations and group projects
Exam Format: multiple choice, essay, short answers

ESPM 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.
ECP 5220 Regulatory Issues in Drug Research  
2 credit(s);  
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: St Hill, Catherine A.  
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: Kartha PhD, Reena  
Description: Student may contact the instructor or department for information.

ECP 8992 Directed Readings in Experimental and Clinical Pharmacology
Family Social Science 290 McNeal Hall

FSoS 1101 Intimate Relationships
4 credit(s); Meets CLE req of Social Sciences
Instructor: Mendenhall PhD, Tai Justin
Description: Intimate Relationships is a course that focuses on the interpersonal dynamics of couples, and on the dynamics of couples in-context. We will explore how intimate relationships evolve and develop, and how they succeed or fail. We will talk about a variety of important relationship topics and skills, including dating, hooking-up, cohabitation, marriage, sexual orientation, gender roles & power, communication & conflict resolution, relationship problems (e.g., abuse, infidelity, divorce), and couple-enrichment/couples therapy. The course's principal goal is to provide an overview of these and related topics, and to help you gain a deeper appreciation and awareness of their importance.
Style: 50% Lecture, 10% Film/Video, 20% Discussion, 20% Small Group Activities.
Grading: 33% final exam, 33% reports/papers, 33% quizzes.
Exam Format: Multiple Choice + Essay

FSoS 1301 Cash or Credit: You Need to Know
A-F only, 1 credit(s);
Instructor: Zuiker PhD, 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

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**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.

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**FSoS 2105 Methods in Family Research**

3 credit(s); STAT 3011 or PSTL 1004 or STAT 1001 or ESPY 3264 or SOC 3811 or SOC 2550 or PSY 3801 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.

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**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.

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**FSoS 3101 Personal and Family Finances**

3 credit(s);

**Instructor:** Solheim PhD, Catherine Ann

**Description:** The importance of financial management is recognized for its major impact on quality of life for individuals and families. This course focuses on personal and family finances, not corporate or government finances. College students' unique financial challenges and their related decisions will be considered as they impact credit ratings and debt accumulation, two areas in which less than optimal decision-making often results in long-term financial stress.

**Style:** 20% Lecture, 5% Film/Video, 15% Discussion, 30% Small Group Activities, 5% Guest Speakers, 25% Web Based. Team-based learning in active learning classroom; students at tables - interact in teams of 3 to solve problems, apply course concepts, discuss. Attendance required for successful course completion

**Grading:** 25% final exam, 27% special projects, 5% quizzes, 25% additional semester exams, 5% class participation, 13% problem solving. Class participation = on-line discussions Three exams plus comprehensive final exam Problem solving = case studies Special project = personal financial planner

**Exam Format:** Multiple choice

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**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.
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: McCulloch, B. Jan
Description: Student may contact the instructor or department for information.

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: Axtell, Sara Ann
Description: Student may contact the instructor or department for information.

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: Oum, Young Rae
Description: Student may contact the instructor or department for information.

FSoS 3191 Independent Study in Family Social Science
1-5 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: The independent study course is for field, library, and laboratory research in family social science. The topics, course content, and readings for the course are developed under the guidance of the supervising faculty member. Prior registration approval is necessary.

FSoS 3426 Alcohol and Drugs: Families and Culture
3 credit(s); Credit will not be granted if credit has been received for: FSOS 5426;
Instructor: Cheek, Patrick
Description: Student may contact the instructor or department for information.

FSoS 3429 Counseling Skills Practicum I
3 credit(s); Credit will not be granted if credit has been received for: FSOS 5429;
Instructor: Meyer, Cynthia Jo
Description: This course is designed to provide students the listening skills necessary to establish a helping relationship and to promote the personal growth and development of people they will see in their future work. It helps students develop skills that are critical in helping other people, including individuals, couples and families. Through class lecture, practice, written exercises, and discussion, this course focuses both on self-awareness about one's desire to help others as well as developing basic skills in helping others.
Style: 50% Lecture, 20% Discussion. skills practice
Grading: 30% final exam, 25% reports/papers, 10% special projects, 15% class participation, 20% other evaluation. Homework assignments
Exam Format: multiple choice and short essay

FSoS 3429 Counseling Skills Practicum I
3 credit(s); Credit will not be granted if credit has been received for: FSOS 5429;
Instructor: Goodman, William Joseph
Description: This course is designed for undergraduate students who anticipate that they will engage in direct client services in the near future and/or undergraduate students preparing for graduate studies in clinical graduate programs such as couple and family therapy or guidance and counseling. The course will provide undergraduate students with the listening skills necessary to establish a helping relationship while promoting the personal, relational growth, and development of people seeking help.
Style: For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full semester) necessary for an average student to achieve an average grade in the course.
Grading: This course is taught with a Contract Grading system. Please consult course syllabus for details.

FSoS 4101 Sexuality and Gender in Families and Close Relationships
3 credit(s);
Instructor: Meyer, Cynthia Jo  
Description: Sexuality and Gender in Families and Close Relationships provides students an opportunity to learn about current research in the field of sexuality, develop comfort applying this information in professional settings, utilize and develop critical thinking skills to examine evidence and biases in the field of sexual science, and to clarify and confirm sexual values as well as understand the impact these values have on one's personal and professional relationships. A variety of topics will be covered including family communication and sexuality education, body image, gender development and development of gender roles, sexuality research, developing healthy sexuality in children, adolescent sexuality, attraction and intimacy, mate selection and other sexuality related topics of importance to relationships and families  
Style: 60% Lecture, 30% Discussion. small group presentations and film  
Grading: 30% mid exam, 30% final exam, 20% reports/papers, 10% special projects, 10% class participation.  
Exam Format: multiple choice

FSoS 4104W Family Psychology  
3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Wieling, Elizabeth  
Description: Family Psychology deals with processes that take place in families of origin, families of choice, and other close relationships within diverse social contexts. The emphasis is on evaluating current research on family dynamics within and across generations. It is an advanced undergraduate course that graduate students may take with permission. It is assumed that students will already be familiar with basic social science research. Students not familiar with this prerequisite material should not enroll and should consider taking a more basic course such as FSoS 3102. “Family psychology represents a significant conceptual leap in the field of psychology. Traditionally, psychologists have focused on the individual as the unit of study. Family psychologists focus on the individual in the context of intimate others. They see the individual within a social system which means their thinking and interventions are relational and contextual in nature. In this respect, the family psychologist is a system thinker. The individual system (the individual), the interactional system (the couple), and the intergenerational system (family-of-origin) are all related and exert reciprocal influences on each other. Viewing the individual within the interlocking nature of these systems results in a more holistic, comprehensive, and multi-determined theory of human functioning.” (p. 10) Weeks, G.R., & Nixon, G.F. (1991). Family psychology: The specialty statement of an evolving field. The Family Psychologist, 7(4), 9-18.  
Style: 60% Lecture, 20% Discussion, 5% Small Group Activities, 5% Student Presentation. role play  
Grading: 30% mid exam, 30% final exam, 30% reports/papers, 5% attendance, 5% in-class presentation.

FSoS 4104W Family Psychology  
3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Sherman, Michelle  
Description: Student may contact the instructor or department for information.

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 PhD, 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, 10% Guest Speakers, 5% Web Based.  
Grading: 41% mid exam, 20% reports/papers, 27% written homework, 12% class participation.
**FSoS 4155 Parent-Child Relationships**  
* A-F only, 3 credit(s);  
* Instructor: Magistad, Beth Maddock  
* Description: This course will cover history, theories, research, and contemporary practices of parent-child relationships in diverse families across the life span. Students will apply theories studied in class to parent-child observations. The course helps to prepare students for professional work in education, social work and other human service occupations as well as to examine parenting from a personal perspective.  
* Style: 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Student Presentation.  
* Grading: 13% mid exam, 13% final exam, 15% reports/papers, 15% special projects, 8% written homework, 26% additional semester exams, 2% in-class presentation, 7% class participation.  
* Exam Format: Multiple choice

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**FSoS 4155 Parent-Child Relationships**  
* A-F only, 3 credit(s);  
* Instructor: Walker, Susan K  
* Description: Student may contact the instructor or department for information.

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**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.

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**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.

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**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.

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**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. community service

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**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.

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**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 it's 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:** Cline, Heather Marie

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

**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:** Cline, Heather Marie

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

**FSoS 5945 Teaching and Learning in Parent Education**

**A-F only, 2 credit(s);**

**Instructor:** Cline, Heather Marie

**Description:**

**FSoS 8001 Conceptual Frameworks in the Family**

**A-F only, 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 8014 Quantitative Family Research Methods II**
A-F only, 3 credit(s);
Instructor: Rueter, Martha A
Description: This course is designed to prepare you to become an independent quantitative family researcher. It is assumed that students taking this course have a solid foundational knowledge of quantitative research methods. In this course, we will build on your knowledge of quantitative methods to help you develop the additional skills and knowledge necessary to design, fund, and properly manage your own family research projects. One of the vehicles for learning is the preparation of a National Institutes of Health R01 grant application. This application covers each component of a well-designed research study. Properly completing the application provides an excellent opportunity to directly apply the full range of skills needed to become a family researcher.
Style: 30% Lecture, 25% Discussion, 20% Small Group Activities, 10% Student Presentation, 5% Guest Speakers, 10% Web Based.
Grading: 80% reports/papers, 20% in-class presentation.

FSoS 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 Couple/Marriage Family Therapy Practicum
S-N only, 1-12 credit(s), max credits 12, 1 completion allowed;
Instructor: Weiler, Lindsey Michelle
Description: Student may contact the instructor or department for information.

FSoS 8296 Couple/Marriage Family Therapy Internship
S-N only, 1-12 credit(s), max credits 12, 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:

Finance 3-122 Carlson School of Management

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  
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), max credits 4;  
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: Singh, Raj  
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;
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 Macro Economics 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: Salomao,Juliana
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
Fina 6801 Finance Independent Study
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Fina 8810 Topics in Asset Pricing
A-F only, 2 credit(s), max credits 4;
Instructor: Belo,Frederico
Description: Student may contact the instructor or department for information.

Fina 8812 Corporate Finance I
2 credit(s);
Instructor: Szydlowski,Martin Adam
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 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: Yudovina,Elena
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); 1002 Credit will not be granted if credit has been received for: FIN 4003;
Instructor: Karvonen, Daniel
Description: This is an intermediate course that requires that you've taken a year of college-level Finnish or have equivalent knowledge of the language. The main textbook for the course is "Suomea paremmin," which focuses on spoken Finnish and is accompanied by a CD. Authentic materials reflecting Finnish culture (e.g., songs, movies, TV news broadcasts, newspaper articles, etc.) will also be used. Much of class time will focus on interactive communicative activities designed to activate the material learned in class, with students working in groups or pairs. Qualified students may register for this course under the 4003 designator for 2 credits (and reduced tuition).
Style: 20% Lecture, 80% Small Group Activities. interactive exercises
Grading: 10% final exam, 18% reports/papers, 28% quizzes, 5% in-class presentation, 29% class participation, 10% other evaluation. oral interviews
Exam Format: short answer, essay

Fin 3011 Advanced Finnish
3 credit(s); 1004 or 4004 Credit will not be granted if credit has been received for: FIN 4011;
Instructor: Karvonen, Daniel
Description: This course is designed to refine advanced students' skills in oral and written expression in Finnish. Advanced grammatical constructions characteristic of written Finnish will be explored via newspaper articles and short stories, with time spent analyzing the constructions together in class. Each student will also get the chance to provide an oral news summary of some current event in Finland every other week. The majority of class time will center around class discussion, giving students plenty of speaking practice. There will be three essays, three take-home exams, and a final class presentation on some aspect relating to Finnish culture.
Style: 10% Lecture, 90% Discussion.
Grading: 24% reports/papers, 30% quizzes, 6% in-class presentation, 28% class participation, 12% other evaluation. oral news summaries
Exam Format: short answer, essay

Fin 4001 Beginning Finnish
2 credit(s); 1004 in another language or passing score on LPE or grad student Credit will not be granted if credit has been received for: FIN 1001;
Instructor: Karvonen, Daniel
Description: Come study the language of sauna, Sibelius, and Nokia! Finnish is unrelated to most languages in Europe and may seem a bit exotic at first. There are no words for "the" or "a," and there's only a single pronoun for both "he" and "she." But you can learn to spell Finnish in just a few minutes, since words in Finnish are written pretty much like they are pronounced. Much of class time will focus on interactive communicative activities, with students working in pairs or in groups. You'll also learn about Finnish culture via video clips of real-life situations in Finland and other authentic cultural materials such as songs and movies. The main textbook for the course is "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 4003 Intermediate Finnish
2 credit(s); 1004 in another language or passing score on LPE or grad student Credit will not be granted if credit has been received for: FIN 1003;
Instructor: Karvonen, Daniel
Description: This is an intermediate course that requires that you've taken a year of college-level Finnish or have equivalent knowledge of the language. The main textbook for the course is "Suomea paremmin", which focuses on spoken Finnish and is accompanied by a CD. Authentic materials reflecting Finnish culture (e.g., songs, movies, TV news broadcasts, newspaper articles, etc.) will also be used. Much of class time will focus on interactive communicative activities designed to activate the material learned in class, with students working in groups or pairs. Qualified students may register for this course under the 4003 designator for 2 credits (and reduced tuition).

Style: 20% Lecture, 80% Small Group Activities. Interactive exercises
Grading: 10% final exam, 18% reports/papers, 28% quizzes, 5% in-class presentation, 29% class participation, 10% other evaluation. Oral interviews
Exam Format: short answer, essay

Fin 4011 Advanced Finnish
2 credit(s); Grad student Credit will not be granted if credit has been received for: FIN 3011; Instructor: Karvonen, Daniel
Description: Student may contact the instructor or department for information.

Fisheries and Wildlife
200 Hodson Hall

FW 1001 Orientation in Fisheries, Wildlife, and Conservation Biology
A-F only, 1 credit(s);
Instructor: Cuthbert, Francesca J
Description: This course is designed for entry level students (e.g. freshmen; transfers) who seek to major in Fisheries and Wildlife. Other students are welcome in the class as well. Opportunities are presented for students to gain knowledge and skills about the major and future employment. Course content includes: overnight weekend field trip to Cloquet Forestry Center; guest speakers representing careers in academic, state, federal and non-profit institutions and agencies. Assignments include preparation of a resume and 8 one-page writing assignments.

FW 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 students become more informed citizens by learning about fish, wildlife and other forms of biodiversity, including single species, populations, ecosystems, and landscape approaches. The class is experiential and highly interactive, using decision-case studies to explore current issues.
Style: 30% Lecture, 50% Discussion, 20% Student Presentation.
Grading: 25% mid exam, 25% final exam, 25% additional semester exams, 15% in-class presentation, 10% class participation.

FW 2003 Introduction to Marine Biology
3 credit(s);
Instructor: Newman, Raymond M
Description: This course provides an introduction to the major themes of life in the oceans. After an overview of the origins and the physical, chemical and geological nature of the oceans, we will cover the diversity, biology and ecology of the organisms found in estuarine, coastal, open and deep seas. We will then look the ecology of these habitats, considering nutrients, energy flow and community and ecosystem responses and the linkage and interaction among the environments. Finally the reliance and effects of humans on these systems will be covered. Selected topics in the study of marine fishes, marine mammals, global change, marine protection and other topics of special interest to biology, conservation and society will be addressed in more detail. The aim of the course is to provide an introduction to the discipline for those who wish pursue a career in aquatic systems and to produce well-informed global citizens who understand the basic biology and ecology of the oceans well enough to contribute to the long-term well being of society and the plant through vocation or avocation.
Style: 65% Lecture, 10% Film/Video, 10% Discussion, 5% Student Presentation, 10% Guest Speakers.
Grading: 25% mid exam, 25% final exam, 15% reports/papers, 25% quizzes, 10% class participation.
Exam Format: Mixed - true/false, multiple choice, fill in figure or diagram, short answer, short essay.

FW 4001 Biometry
A-F only, 4 credit(s);
Instructor: Fieberg, John Robert
Description: Student may contact the instructor or department for information.
FW 4136 Ichthyology  
4 credit(s);  
Instructor: Simons, Andrew M.  
Description: This course covers the biology and diversity of fishes. Topics covered include evolution, classification, anatomy, locomotion, and behavior. Fishes are a large and diverse group of organisms; therefore these topics will be covered at a general level, focussing in large part on the constraints imposed by the aquatic environment. The laboratory will cover anatomy and diversity of fishes, focussing on the Minnesota fauna. Students will learn the use of dichotomous keys to identify Minnesota fishes and will be expected to learn common and game species by sight. There will be two afternoon field trips during the semester. Assessment is based on 3 lecture exams, 2 lab exams, 1 paper, and participation in lab. Lecture notes and other supplementary material will be available on the web. Students in this class are usually upper level undergraduates or graduate students.

FW 4291 Independent Study: Fisheries  
1-5 credit(s), max credits 15, 3 completions allowed;  
Instructor: STAFF  
Description: Individual field, library, and laboratory research in fisheries. Primarily for majors. Students work on special projects. Individual field, library, and lab research in fisheries biology.  
Style: special projects and individual directed study  
Grading: 100% reports/papers. 100% written reports/papers; may have occasional exceptions

FW 4391 Independent Study: Wildlife  
1-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: STAFF  
Description: Individual field, library, and laboratory research in wildlife. Primarily for majors. Students work on special projects. Individual field, library and lab research in fisheries biology.  
Style: special projects and individual directed study; visitation to field sites if appropriate  
Grading: 100% reports/papers.

FW 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: Blair, Robert B
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 1001 Orientation to the Majors: Food Science and Nutrition
A-F only, 1 credit(s);
Instructor: Smith, David Eugene
Description: Student may contact the instructor or department for information.

FScN 1011 Science of Food and Cooking
4 credit(s); Meets CLE req of Physical Sciences
Instructor: Smith, David Eugene
Description: Description: This course examines physical and chemical changes occurring during common food preparation techniques. We will use actual food systems such as soufflés, 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. Class Time: 75%

Lecture, 25% Laboratory. Work Load: 10 pages reading per week, 50 pages writing per term, 4 exams, 10 papers, 1 presentations, 1 special projects. Papers, above will be group lab reports. The presentation and special project are also done as a group Grade: 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.

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

**Grading:** 40% mid exam, 20% final exam, 30% reports/papers, 10% special projects.

**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 power point and MP4 presentation 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. Students critically evaluate information on supplements and submit weekly homework and reflections 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:** 60% 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 answers and essays

**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

**Exam Format:** Supervised, in-person (not online) exams.
FScN 1112 Principles of Nutrition
3 credit(s);
Instructor: Rosen, Renee A
Description: Student may contact the instructor or department for information.

FScN 1112 Principles of Nutrition
3 credit(s);
Instructor: Trudo, Sabrina Peterson
Description: Student may contact the instructor or department for information.

FScN 1112 Principles of Nutrition
3 credit(s);
Instructor: Mashek, Douglas
Description: This course is designed to provide students with an introduction to nutrition. We will cover a broad array of topics including: 1) description and classification of the different nutrients; 2) major functions of nutrients and physiological changes resulting from their deficiency or excess; 3) digestion, absorption, and metabolism of nutrients; 4) nutrition-related diseases; 5) nutrition during the life cycle; and 6) food sources of nutrients and food safety issues. Prerequisite is high school biology and chemistry, but additional science courses (college biology, chemistry, biochemistry, etc.) are helpful. In addition to quizzes (online) and exams (in class), students will also complete several assignments involving a dietary assessment that provides an in-depth evaluation of their own diets.
Style: 90% Lecture, 5% Discussion, 5% Small Group Activities.
Grading: 21% final exam, 21% reports/papers, 17% quizzes, 41% additional semester exams.

FScN 1905 Topics: Freshman Seminar: Antioxidants: How They Protect Your Food and Body
A-F only, 3 credit(s), max credits 3, 1 completion allowed;
Instructor: Csallany, A Saari
Description: Student may contact the instructor or department for information.

FScN 2002 Healthy Foods, Healthy Lives - Cooking on a Student's Budget
1 credit(s);
Instructor: Kurzer PhD, Mindy Susan
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 3102 Introduction to Food Science
3 credit(s);
Instructor: Vickers, Zata M
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
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.
FScN 4123 Molecular Biology for Applied Scientists
A-F only, 1 credit(s);
Instructor: O'Sullivan, Daniel J
Description: Student may contact the instructor or department for information.

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: Reineccius, Gary A
Description: Student may contact the instructor or department for information.

FScN 4612 Advanced Human Nutrition
4 credit(s);
Instructor: Carlson, Justin L
Description: Student may contact the instructor or department for information.

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
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: No description provided.

FScN 5101 Food Regulation in the United States
A-F only, 2 credit(s);
Instructor: Dickinson, Annette
Description: This course -- Food Regulation in the U.S. -- will provide students with an understanding of the U.S. system of regulation of food product formulation, manufacturing, labeling and advertising, including insight into the manner in which regulation and the underlying food laws are affected by scientific developments and changing societal values and concerns. Objectives: Students will (1) gain an understanding of the basic laws and regulations governing the formulation, manufacturing, labeling and advertising of foods in the U.S.; (2) comprehend the jurisdiction and complex interaction of FDA, USDA, FTC, other Federal agencies, and the various States in regulating food safety, food labeling, and food advertising; (3) gain insight into the ways in which societal concerns and continually emerging new scientific evidence affect the development and modification of laws and regulations; and (4) be able to identify the many different stakeholders that affect the shape of food laws and regulations and be able to analyze key regulatory issues from different perspectives. There is no textbook. Readings will be selected by the instructor and will include FDA regulations, other FDA documents such as proposed rules and industry guidance, USDA documents, FTC complaints and consent orders, laws affecting food regulation, and court decisions. Each week, students will prepare a brief summary of the assigned reading, prior to class discussion. Each student will select a commercial food product during the first week of class and will evaluate regulatory issues throughout the semester not only in a general sense but also with particular reference to that product. Each student will write a paper (2 to 6 pages, double spaced) identifying the required and optional features of the product label, citing relevant regulations relating to the legality of the product's ingredients, discussing the appropriateness of any labeling or advertising claims identified for the product, and commenting on any label shortfalls in terms of full compliance with applicable regulations. This paper will count for 20% of the course grade. Each student will select a current or recent proposed regulation of interest to them and will draft comments on the issues raised by the proposal, from the point of view of an affected company or from the point of view of a professional association (such as IFT, ASN, ADA, etc) or a trade association with an interest in the subject. Draft comments will be in the form of a formal submission to the agency, will be at least 4 pages but not more than 8 pages in length (double-spaced), and will count for 20% of the course grade.
Style: 80% Lecture, 20% Discussion. Some portions of lectures may be given by invited speakers.
Grading: 20% mid exam, 20% final exam, 40% reports/papers, 20% written homework.
Exam Format: Objective questions requiring some analysis of regulatory issues.

FScN 5122 Food Fermentations and Biotechnology
A-F only, 2 credit(s);
Instructor: O'Sullivan, Daniel J
Description: No description provided.

FScN 5123 Molecular Biology for Applied Scientists
A-F only, 1 credit(s);
Instructor: O'Sullivan, Daniel J
Description: No description provided.

FScN 5131 Food Quality for Graduate Credit
A-F only, 3 credit(s);
Instructor: Schoenfuss PhD, Tonya C
Description: No description provided.

FScN 5312 Food Analysis
FScN 5441 Introduction to New Product Development
2 credit(s);
Instructor: Schoenfuss PhD,Tonya C
Description: Student may contact the instructor or department for information.

FScN 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 teh 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 therapeutuic 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 typically 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: Vickers,Zata M
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 8338 Antioxidants in Food: Practical Applications
2 credit(s);
Instructor: Csallany,A Saari
Description: Student may contact the instructor or department for information.

FScN 8391 Independent Study: Food Science
1-4 credit(s), max credits 6, 6 completions allowed;
Instructor: Cannon,Sara Jane
Description: Student may contact the instructor or department for information.

Forest and Natural Resource Management 115 Green Hall

FNRM 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
FNRM 1101 Dendrology: Identifying Forest Trees and Shrubs
3 credit(s);
Instructor: North, Eric Alan
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

FNRM 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

FNRM 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: FNRM 5104;
Instructor: Montgomery, Rebecca Anne
Description: Ecology, the study of the interactions of organisms and their environment, forms the essential foundation of the management and conservation of the world's ecosystems. This course examines basic ecological principles through the lens of forest ecosystems, exploring the theory and practice of ecology at various levels of organization from individuals to populations, communities and ecosystems. At each level we examine past and current theoretical advances and use case studies to evaluate the impacts of increasing human domination of global systems on forested ecosystems. The course covers diverse topics including global climate change; individual and population growth; community assembly; invasive species; biodiversity; and alteration of water, carbon and nutrient cycles. During two class periods per week we explore forest ecology through a combination of lecture, group learning and problem solving, and discussion. Labs include group research projects and trips to local natural areas, urban forests, and the north shore of Lake Superior. Lab sessions are designed to complement and reinforce material covered in regular class periods.
Style: 40% Lecture, 30% Laboratory, 25% Small Group Activities, 5% Field Trips. Cooperative group learning activities. Laboratory involves field trips and data collection in forests around the metro area.
Grading: 30% mid exam, 20% final exam, 5% reports/papers, 15% special projects, 20% class participation. Class participation includes cooperative group work, quizzes, minute papers, in-class writing, quizzes. The special project is your lab project presentation (oral or poster format).
Exam Format: A mixture of definitions, multiple choice, matching, short and long essay
FNRM 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: FNRM 5114;
Instructor: Karwan,Diana Louise
Description: This course provides an introduction to the hydrologic cycle in the context of wildland watersheds. Major components of the hydrologic cycle, namely precipitation, canopy interception, infiltration, soil water storage, runoff, streamflow, and groundwater flow, will be emphasized. The management of water resources and the response of water quantity and quality to anthropogenic activity will also be discussed.

FNRM 3131 Geographical Information Systems (GIS) for Natural Resources
A-F only, 4 credit(s);Soph or jr or sr or UHP frCredit will not be granted if credit has been received for: FNRM 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

FNRM 3204 Landscape Ecology and Management
A-F only, 3 credit(s);Ecology courseCredit will not be granted if credit has been received for: FNRM 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

FNRM 3262 Remote Sensing of Natural Resources and Environment
3 credit(s);Credit will not be granted if credit has been received for: FNRM 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: 80% 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.

FNRM 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.

FNRM 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.

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

FNRM 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.

FNRM 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.

FNRM 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Blinn, Charlie
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Schneider, Ingrid Eleanore
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Bauer, Marvin E
Description: Student may contact the instructor or department for information.

FNRM 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Johnson, Gary
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 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.
Instructor: David, Andrew J
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 4293 Directed Study
1-5 credit(s), max credits 15, 3 completions allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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: FNRM 3104;
Instructor: Montgomery, Rebecca Anne
Description: Ecology, the study of the interactions of organisms and their environment, forms the essential foundation of the management and conservation of the world's ecosystems. This course examines basic ecological principles through the lens of forest ecosystems, exploring the theory and practice of ecology at various levels of organization from individuals to populations, communities and ecosystems. At each level we examine past and current theoretical advances and use case studies to evaluate the impacts of increasing human domination of global systems on forested ecosystems. The course covers diverse topics including global climate change; individual and population growth; community assembly; invasive species; biodiversity; and alteration of water, carbon and nutrient cycles. During two class periods per week we explore forest ecology through a combination of lecture, group learning and problem solving, and discussion. Labs include group research projects and trips to local natural areas, urban forests, and the north shore of Lake Superior. Lab sessions are designed to complement and reinforce material covered in regular class periods. At the graduate level, students work in a graduate cooperative learning group during class periods, design an interactive learning activity and participate in an weekly literature discussion group.
Style: 15% Lecture, 20% Discussion, 50% Laboratory, cooperative group learning activities
Grading: 20% mid exam, 15% final exam, 20% reports/papers, 15% special projects, 3% quizzes, 5% in-class presentation, 20% class participation, 3% laboratory evaluation.
Exam Format: Graduate exams will be essay format

FNRM 5114 Hydrology and Watershed Management
3 credit(s); Grad student or instr consent. Credit will not be granted if credit has been received for: FNRM 3114;
Instructor: Karwan, Diana Louise
Description: This course provides an introduction to the hydrologic cycle in the context of wildland watersheds. Major components of the hydrologic cycle, namely precipitation, canopy interception, infiltration, soil water storage, runoff, streamflow, and groundwater flow, will be emphasized. The management of water resources and the response of water quantity and quality to anthropogenic activity will also be discussed.
FNRM 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: FNRM 3131;
Instructor: Jenks, Andrew Carl
Description: Introduction to GIS. Focuses natural resources. Data structures, sources, collection, and quality. Lab exercises introduce geodesy, map projections, spatial analyses, and cartographic modeling.

FNRM 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: FNRM 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.

FNRM 5259 Visitor Behavior Analysis
3 credit(s);
Instructor: Davenport, Mae Allen
Description: Student may contact the instructor or department for information.

FNRM 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: FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.
FNRM 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.

FNRM 8103 Research Problems: Forest Hydrology
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Karwan, Diana Louise
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 8107 Seminar: Forest Resources
1 credit(s);
Instructor: Thompson, Jerrilyn LaVarre
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 8201 Research Problems: Forest Economics
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.
FNRM 8203 Research Problems: Forest Recreation
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Schneider, Ingrid Eleanore
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 8204 Research Problems: Forest Policy
1-5 credit(s), max credits 10, 4 completions allowed;
Instructor: Becker, Dennis R
Description: Student may contact the instructor or department for information.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.

FNRM 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.
FNRM 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.

FNRM 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.

FNRM 8208 Research Problems: Environmental Learning and Leadership
1-5 credit(s), max credits 5, 1 completion allowed;
Instructor: Carlson PhD, Stephan Paul
Description: Student may contact the instructor or department for information.

French 314 Folwell Hall

Fren 1001 Beginning French
5 credit(s);
Instructor: STAFF
Description: This course is intended for students with NO previous study of French, or students who have not studied French in recent years (gap of 3 years or more). If you have more than two years of high school French completed within the last year or two, you should register for Fren 1022 which provides students with an accelerated review of Fren 1001 material followed by material covered in Fren 1002. For further information on placement, please see your advisor or contact the Department of French and Italian. This course will develop your communication skills in French in different areas: speaking, writing, listening and reading while developing a better understanding of diverse aspects of French-speaking cultures. The text, "Deux Mondes," 7th ed. is accompanied by an electronic workbook (Connect) with a variety of practice activities. In the "Deux Mondes" textbook you 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: 15% final exam, 12% reports/papers, 10% special projects, 8% quizzes, 30% other evaluation. written exams; 15% speaking exams; 10% workbook exercises
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: STAFF
Description: Fren 1002 is intended for students who have completed Fren 1001 or the equivalent. In this course you will build on the interpersonal, interpretive and presentational skills developed in first-semester French and on your knowledge and understanding of Francophone cultural practices and products. Cultural content is taught through multimedia and cultural readings. Fren 1002 is a theme-based course. Themes addressed in this course include: Francophone youth, Francophone cuisine, geography and culture of French regions, the French educational system, ecological practices, employment and other work-related issues important to Francophone youth, immigration in France in particular second-third generation immigrant issues, travel in the Francophone world. The text, "Deux Mondes," 7th ed., is accompanied by an electronic workbook (Connect) with a range of practice activities. In the "Deux Mondes" textbook you 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, 15% final exam, 12% reports/papers, 8% special projects, 5% quizzes, 15% workbook exercises
Exam Format: All exams evaluate listening, vocabulary, grammar, writing, reading and culture. Oral skills are assessed in pair discussions.

Fren 1003 Intermediate French
5 credit(s);
Instructor: STAFF
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 cultural readings and multimedia. 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," 7th ed., is accompanied by an electronic workbook (Connect) with a variety of practice activities (including listening), designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with materials from Ch. 1 through Ch. 14. They will also work with the video series '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:** 13% final exam, 20% reports/papers, 7% quizzes, 10% written homework, 22% additional semester exams, 3% class participation, 25% other evaluation.

**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.

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**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. 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:** 5% final exam, 20% reports/papers, 5% quizzes, 5% written homework, 30% additional semester exams, 13% class participation, 22% other evaluation.

**Exam Format:** Exams assess a student's listening, reading, speaking and writing proficiency. Oral exams are administered in pairs, written exams involve answering short questions and essay writing.

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**Fren 1022 Accelerated Beginning French**

5 credit(s); 2 or more yrs high school French

Credit will not be granted if credit has been received for: FREN 4002;

Instructor: STAFF

**Description:** Prereq: 2 or more yrs high school French. This beginning French course for false beginners is intended for students who have previously studied French in high school or at a community college, or who are transfer students, while Fren 1001 is a course for students with no previous French studies. The Fren 1022 course starts with a review of Fren 1001 materials (Ch. preliminaire through Ch. 5 in "Deux Mondes" 7th ed.), followed by materials introduced in Fren 1002 (Ch. 6 through Ch. 10). The course allows students to learn first-year content in one semester. Upon entering Fren 1022 you should be familiar with basic vocabulary related to daily life and daily survival situations, present and past tenses (please note: "passe compose" will be reviewed and "imparfait" will be introduced). Fren 1022 is a theme-based course. Themes addressed in this course include: Francophone youth, Francophone cuisine, geography and culture of French regions, the French educational system, ecological practices, employment and other work-related issues important to Francophone youth, immigration in France in particular second-third generation immigrant issues, travel in the Francophone world. In this course you will build on your interpersonal, interpretive and presentational skills in French and on your knowledge and understanding of Francophone cultural practices and products. Cultural content is taught through multimedia and cultural readings. The text, "Deux Mondes," 7th ed., is accompanied by an electronic workbook (Connect) with a range of practice activities. 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:** 35% written exams, 15% oral exams, 15% final exam, 12% reports/papers, 8% special projects, 7% quizzes, 8% 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 1908W Freshman Seminar: Camus & Sartre: Exploring a French Legend**

A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive

Instructor: Chaouat, Bruno
Camus and Sartre are two writers and thinkers at the crossroad of French modernity. Their names resonate with political causes: Resistance against Nazi Germany, anti-fascism and anti-colonial struggle. Their names also resonate with the philosophical movement known as ?existentialism.? In this course, students will explore the works of those two luminaries of the French intellectual landscape through all the genres of writing that they have mastered: philosophy, polemics, theater, and prose. Students will also understand what made them at times so close and what separated them, especially through their approach to the question of violence, ethics and politics. By comparing Camus?'s and Sartre?'s responses to French colonial violence in Algeria, students will be introduced to the history of French colonial empire and to the different ways of resisting/responding to colonialism. The importance of the Second World War in the work and life of Camus and Sartre will allow students to learn about the history of Europe, and responses (allegorical, literary, philosophical) to fascism, Nazism and the Holocaust. Finally, the two writers were deeply affected by the communist revolution and by the Soviet model and both responded very differently to communism. Studying their respective and opposite responses will allow students to learn about Soviet Russia through theater performances and essays.

Fren 3014 French Phonetics
3 credit(s);
Instructor: Treece PhD,Rick
Description: This course consists of a rigorous development of your mastery of spoken French, with a strong emphasis on improving pronunciation through focus on both the theoretical and practical aspects of French 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 how symbols from the International Phonetic Alphabet are used to represent French sounds. 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. For the sake of applying their new articulatory habits in spontaneous, unscripted contexts, students will do oral presentations on the main institutions of modern French culture. Students will receive ample input in preparation for these presentations, with special emphasis on lexical development (especially of academic registers of usage); they will also explore the same topics in informal online video chats with French student partners.
Style: 10% Lecture, 10% Discussion, 80% Laboratory.
Grading: 10% final exam, 20% quizzes, 15% class participation, 45% laboratory evaluation, 10% other evaluation. online voice-exchange with a French student
Exam Format: short answer, multiple choice

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

Fren 3016 Advanced French Composition and Communication
3 credit(s);
Instructor: STAFF
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 3015, students will develop skills in a variety of writing forms (e.g. portrait, description, narration) while exploring selected cultural themes through written texts and film. Course requirements include exams as well as regular writing assignments, which usually involve at least one rewriting. In order to enroll in 3015, it is highly recommended that students have completed Fren 1004 with a minimum grade of B; transfer students should take the Language Proficiency Exam and receive a High Pass. For information on the LPE, see <a href="http://langtest.umn.edu/imdatesGPT.html">http://langtest.umn.edu/imdatesGPT.html</a>
Style: Language instruction
Exam Format: Grammar exercises, essays
**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

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**Fren 3022 The Language and Culture of Business in France**

**3 credit(s);**

**Instructor:** Mougel, Patricia M.

**Description:** Fren 3022 is an advanced French content-based course. Themes addressed in the course are: France's economy in Europe and in the world, business creation/organization/expansion and decline, green business and marketing practices, employment/unemployment, human resources management, diversity in the workplace, job-search procedures. You will learn how to interpret written and visual texts on contemporary business and work issues in France, translate short texts, write standard business letters and job and internship applications, how to hold a telephone conversation, how to participate in a job interview. We will also describe, analyze and discuss sustainable business practices in France through case studies of businesses that have moved towards sustainability in terms of resources selection, product development, marketing and human resources management. We will make extensive use of authentic written and visual texts (newspaper and magazine articles, news broadcasts, documentaries, websites) which will allow you to gain insights into current socio-economic issues in France and gain a better understanding of similarities and differences in business and employment practices between France and the United States. Interpretation of authentic documents, discussions, expressing and supporting one's opinion, narrating in paragraphs, comparing/contrasting orally and in writing will be emphasized. This course is web-enhanced and will allow you to further develop your language and intercultural communication competence outside of class while exploring business content.

**Style:** 25% Lecture, 30% Discussion, 25% Small Group Activities, 20% Student Presentation.

**Grading:** 18% reports/papers, 15% special projects, 10% quizzes, 20% in-class presentation, 7% class participation, 30% other evaluation. 3 written exams: 30%

**Exam Format:** Short answer questions and essay writing.

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**Fren 3016 Methods in French and Francophone Studies**

**4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive**

**Instructor:** Noakes, Susan J

**Description:** What has been "interdit" in French culture? The banned or prohibited will provide the focus of this section of French 301W. French literary works which have caused their authors to be indicted, imprisoned, or exiled from France will form the core of the reading list. The class will also study less official ways in which French language and culture creates boundaries between the forbidden and the permitted, from street riots to the incalculation of such concepts as "les bienseances" and "le bien range." Visual languages, as used in advertising, drawing, painting, and cinema, will form an essential element in the course, which will include the viewing of several banned films. The class will consider such cultural artifacts as wine, tapestries, chastity belts worn by French queens, and French fashion through the centuries. Students will also have the opportunity to view, discuss in French, and write about a performance, at the Guthrie Theater, of a play based on medieval French literature, dealing with the negotiation between what is forbidden and what is allowed. In relation to this play, and the poem on which it is based, students will listen to and analyze a number of French songs. Analysis and discussion of course materials should help students to understand better the nature and history of French culture and its ways of establishing and policing norms. Interestng contrasts between French and, for example, American culture will emerge. Study of works by French thinkers which inquire into aspects of the forbidden (Barthes, Kristeva, Foucault, Derrida, Fanon, Bourdieu) will also form a part of the course. Reading, in French, will average 50 pp. per week. Several short papers are required, in fulfillment of the writing-intensive requirement; these papers will be graded for grammar, vocabulary, and logic, which the instructor understands as important elements of "content." Each student will also organize and lead discussions on multiple occasions and present several solo reports to the class. All assignments are designed to fulfill the objective of teaching useful methods for or approaches to understanding and analyzing French literary and non-fictional texts, cultural artifacts, and audio and visual media. Students reluctant to study and discuss forbidden (and thus, to some, potentially offensive) French material are encouraged to select another section. Moreover, this section will require very regular preparation, attendance, and participation; students unable to commit to a four-credit course, with the workload specified by the Faculty Senate, should not sign up for this section. The Faculty Senate requires eight hours weekly preparation time to earn a passing grade (C); students who wish to earn better than a C must regularly have more than eight hours of preparation time available weekly.

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**Fren 301W Methods in French and Francophone Studies**

**4 credit(s); Meets CLE req of Literature; meets CLE req of Writing Intensive**

**Instructor:** Brewer, Maria M

**Description:** FREN 301W "Bridging Divides, Creating Passages" is a writing intensive course offering a broad
FREN 3260 DRAMAS OF CULTURE: 20TH-CENTURY FRENCH AND FRANCOPHONE THEATER

Course: 3 credit(s); meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Brewer, Maria M

Description: This course is focused on the innovative dramatists, key movements, and contexts of 20th and 21st-Century French and Francophone theater. Areas of study include naturalist and symbolist legacies as well as existentialist, avant-garde, and contemporary performance and drama. Topics such as the following will be pursued: 1) sites of theater in modern culture and their significance in making social, political, and historical spaces perceptible, 2) innovative staging of the individual and collective voice, the body, language, and the unconscious, 3) complexities of cultural thresholds in contemporary theater, and 4) the role of the audience in theater as event. Critical essays and plays we study include the work of Antonin Artaud, Bertolt Brecht, Aime Cesaire, Jean-Paul Sartre, Samuel Beckett, Helene Cixous, Bernard-Marie Koltes, and Koffi Kwahule. Plays are treated from a variety of interdisciplinary perspectives, including their context, relation to theater history, practices of representation, and innovations in staging. The course, taught in French, combines a lecture and discussion format. Class Time: 60% Lecture, 40% Discussion. Work Load: 60 pages reading per week, 15 pages writing per term, 1 exam, 3 papers. Grade: 20% mid exam, 60% reports/papers, 20% class participation and presentations.
Exam Format: essay
Style: 60% Lecture, 40% Discussion.
Grading: 20% mid exam, 60% reports/papers. 20% class participation and presentations.
Fren 3333 The Idea of Paris: Writing and Viewing the City
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Brewer, Daniel
Description: (Course taught in English.) This course investigates the multiple meanings that the idea of Paris has acquired over the last two centuries in the French cultural imaginary. Tracing the emergence of the modern urban city over this period, we will work with literary texts, painting, photography, film, and historical and cultural-critical writing in order to understand the multiple attempts to make Paris legible and visible in texts and images, to create a Paris that stands as a metaphor for complex and conflictual urban and global modernity. We will examine in texts and images the many forms that the experience of modernity may take on: alienation within mass culture, technology, urban pleasure, the rise of capitalism and the consumer society, memory loss and nostalgia, resistance and revolution, and a modernist art and aesthetic theory that responds to these forms of urban experience. For French major/minor credit, most course work must be done in French (readings and papers); optional discussion group meetings outside of class will be held in French. Offered concurrently with Fren 3733 (for CLA credit only).
Style: 35% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 15% Student Presentation.
Grading: 15% mid exam, 25% final exam, 30% reports/papers, 10% quizzes, 10% in-class presentation, 10% class participation.

Fren 3521 History of the French Language
3 credit(s);
Instructor: Kerr, Betsy Jean
Description: In this course, students will study the development of the French language from Latin to modern French. Both internal factors affecting development (e.g., simplification of words through sound changes) and external factors (e.g., historical and social changes) will be examined in order to give students an understanding of how the French language came to be what it is today. The class will follow a discussion/lecture format, with emphasis on discussion. Some class time will be spent working with other students in small groups discussing questions related to the readings or working on linguistic analyses of texts from various periods. Readings and discussion in French. Students will do reports of independent reading five times in the semester. Three exams, numerous assignments. Use of WebVista site is an integral part of the course. We will make extensive use of the site indicated below on the history of the French language.
Style: 40% Lecture, 60% Discussion.
Grading: 40% mid exam, 20% final exam, 25% reports/papers, 15% class participation.
Exam Format: Mostly short answers and essay, some true/false

Fren 3733 The Idea of Paris
3 credit(s); Meets CLE req of Global Perspectives
Instructor: Brewer, Daniel
Description: (Course taught in English.) This course investigates the multiple meanings that the idea of Paris has acquired over the last two centuries in the French cultural imaginary. Tracing the emergence of the modern urban city over this period, we will work with literary texts, painting, photography, film, and historical and cultural-critical writing in order to understand the multiple attempts to make Paris legible and visible in texts and images, to create a Paris that stands as a metaphor for complex and conflictual urban and global modernity. We will examine in texts and images the many forms that the experience of modernity may take on: alienation within mass culture, technology, urban pleasure, the rise of capitalism and the consumer society, memory loss and nostalgia, resistance and revolution, and a modernist art and aesthetic theory that responds to these forms of urban experience. All readings, writing assignments, and discussion will be in English. Taught concurrently with Fren 3333.
Style: 35% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities, 15% Student Presentation.
Grading: 15% mid exam, 25% final exam, 30% reports/papers, 10% quizzes, 10% in-class presentation, 10% class participation.

Fren 4001 Beginning French
2 credit(s);
Instructor: STAFF
Description: This course is intended for students with NO previous study of French, or students who have not studied French in recent years (gap of 3 years or more). If you have more than two years of high school French completed within the last year or two, you should register for Fren 4022 which provides students with an accelerated review of Fren 4001 material followed by material covered in Fren 4002. For further information on placement, see your advisor or contact the Department of French and Italian. Fren 4001 is a theme-based course. Students develop their communication skills in French in different areas: speaking, writing, listening and reading. In addition to linguistic skills, students develop a better understanding of diverse aspects of French-speaking cultures. Themes addressed in the course include: student life, family, recreation, life in Francophone cities, housing, Francophone heritage in Northern America and Canada. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia) with a variety of practice activities including listening ones, designed to be used by students outside of class. In the "Deux Mondes" textbook students will work with
materials from "Premiere Etape" through Ch. 5. Since the majority of class is devoted to communication activities, class attendance is fundamental. Expect an average of 1.5 hours of outside preparation for each class session hour.

**Fren 4022 Beginning French**

2 credit(s); Grad student
Credit will not be granted if credit has been received for: FREN 1022;
Instructor: STAFF

Description: Fren 4022 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: Most discussion and student involvement in pair/group activities

Exam Format: Exams assess a student's listening, reading, speaking and writing proficiency. Oral exams are administered in pairs, written exams involve answering short questions and essay writing.

**Fren 4022 Accelerated Beginning French**

2 credit(s); Grad student
Credit will not be granted if credit has been received for: FREN 1002;
Instructor: STAFF

Description: Prereq: 2 or more yrs high school French
This beginning French course for false beginners is intended for students who have previously studied French in high school or at a community college, or who are transfer students, while Fren 4001 is a course for students with no previous French studies. The Fren 4022 course begins with a review of Fren 4001 materials (Ch. preliminaire through Ch. 5 in "Deux Mondes" 6th ed.), followed by materials introduced in Fren 4002 (Ch. 6 through Ch. 10). In other words, the course allows students to learn first-year materials in one semester. Upon entering Fren 4022 students should be familiar with basic vocabulary related to daily life and daily survival situations, present and past tenses (please note: "passe compose" will be reviewed and "imparfait" will be introduced). Fren 4022 is a theme-based course. Themes addressed in this course include: student life, family, recreation, housing, Francophone heritage in North-America, Francophone youth, food, geography, the environment, travel, education and employment. Students develop knowledge and understanding of Francophone practices and products through multimedia and cultural readings. The text, "Deux Mondes," 6th ed., is accompanied by an electronic workbook (Quia/Centro) with a variety of practice activities including listening ones, designed to be used by students outside of class. Since the majority of class is devoted to communication class attendance is fundamental.

Grading: 36% written exams, 15% oral exams, 13% final exam, 12% reports/papers, 10% special projects, 7% quizzes, 7% workbook exercises

Exam Format: All exams evaluate listening, vocabulary, grammar, writing, reading and culture. Oral skills are assessed in pair discussions.
Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Noakes, Susan J
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Brewer, Maria M
Description: Student may contact the instructor or department for information.

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 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Wall-Romana, Christophe M
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Franklin-Brown, Mary
Description: Student may contact the instructor or department for information.

Fren 4109W Senior Project in French and Francophone Studies
A-F only, 1 credit(s); Meets CLE req of Writing Intensive
Instructor: Abderrezak, Hakim
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive
Instructor: Noakes, Susan J
Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Brewer, Maria M  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Kerr, Betsy Jean  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Preckshot, J E  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Brewer, Daniel  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Sivert, Eileen B  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Cherbuliez, Juliette  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Chaouat, Bruno  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Wall-Romana, Christophe M  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Franklin-Brown, Mary  
Description: Student may contact the instructor or department for information.

Fren 4110V Honors Thesis  
A-F only, 1-2 credit(s), max credits 4; Meets CLE req of Writing Intensive  
Instructor: Abderrezak, Hakim  
Description: Student may contact the instructor or department for information.

Fren 4970 Directed Readings  
1-4 credit(s), max credits 9, 9 completions allowed;  
Instructor: STAFF  
Description: Meets unique requirements decided on by faculty member and student. Individual contracts are drawn up listing contact hours, number of credits, written and other work required.

Fren 5350 Topics in Literature and Culture: Mediterranean Works: Art & Literature
In this seminar we will study the Mediterranean. We will take a comprehensive look at what is simultaneously a sea, a geographical region that expands beyond its shores, a political notion, a historical crossroads, a geopolitical knot, an ideological view of the world, and an academic frame of reference. Our examination will show that the Mediterranean has constituted a multifarious variety of designata for various peoples in various epochs. After this overview, with glimpses into several academic disciplines, including anthropology, geography, and history, we will shift our attention to what the Mediterranean has become in the realms of media and politics. Next, we will focus on representations of the Mediterranean and issues that have been associated with it in contemporary discourses for local authors and artists. Our corpus will include novelists, political cartoonists, and painters. The majority of productions we will examine are from western Mediterranean countries and especially by francophone writers and artists hailing from North Africa (Morocco, Algeria, and Tunisia).

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 8110 Topics in Early Medieval French Literature
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Franklin-Brown, Mary
Description: "Poetry, Politics, and Community in High Medieval France" This graduate seminar will posit that poetry is not a purely aesthetic object divorced from the historical, ethical, or political, but neither is its relation to those domains easy to discern. We will therefore reconsider the oral and written texts that helped constitute communities, assert authority, and express dissent during a period of weakened central power and rapid social change. The period studied will extend from the end of the ninth century, when the Carolingian Empire was divided, to the middle of the thirteenth, when the newer monarchies had largely consolidated power and translations of Aristotle's Politics and Poetics became available in the West, initiating new theorizations. However, we will give particular attention to texts in Old French and Occitan from the twelfth century. We will discuss the formal properties and modes of circulation for the texts in question, drawn from the genres of chronicle, monastic rule, saint's life and liturgical poetry, epic (the chanson de geste), and lyric (the troubadour vers, sirventes, and planh). How did these texts function in their original context, and what was their relation to ritual practices? To what interpretive methods do the texts lend themselves? What kinds of questions can they help us answer? What kinds of inquiry do they (or the way in which they have been transmitted to us) thwart? But the course will not be restricted to literary-historical questions. We will also ask how medieval writers' treatments of ethics and politics resonate with discussions of these topics in our own time and how medieval material has been put to use by theorists working today. The seminar will thus balance literary, historical, and theoretical concerns. Students from all departments are welcome. Those whose disciplines overlap with the course topic (literature, history, political science, philosophy, musicology, art history, classical studies) will be able to choose paper topics appropriate for their disciplines. Discussion will be conducted in English. All texts will be available in modern English or French translation (a few texts are available only in French, so some reading knowledge of the language is prerequisite for the course). Students who possess a good reading knowledge of modern French and wish to study the epics in the medieval language may enroll in the optional one-credit Old French Workshop (French 8190).

Fren 8190 Old French Workshop
S-N only, 1 credit(s), max credits 2;
Instructor: Franklin-Brown, Mary
Description: Student may contact the instructor or department for information.

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: Franklin-Brown, Mary
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: Abderrezak, Hakim
Description: Student may contact the instructor or department for information.

French and Italian  314 Folwell Hall

Frt 3850 Topics in French and Italian Cinema: Fabbri
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Fabbri, Lorenzo
Description: TRANSNATIONAL NEOREALISM: ITALIAN CINEMA IN THE LIGHT OF GLOBALIZATION Drawing from recent scholarship on neorealism and more broadly from the "global turn" in cultural studies, this semester we will tackle Italian neorealism a transnational phenomenon. First we will investigate the influence of French naturalism and cinematic realism on 1930s Italian cinema. Then we will scrutinize the canonical films of Italian neorealism to grasp the crucial features of this cinematic movement and understand why it has been awarded the status of keystone in film history. Finally, we will explore the after-life of neorealism, by tracking the role that Italian films had in the emergence of new cinemas and new waves worldwide. The ultimate goal of this course is to locate Italian neorealism within wider European and global networks, while familiarizing students with the key terms, concepts, and techniques of film analysis. IN ENGLISH.

Frt 5850 Topics in French and Italian Cinema: Neorealism and World Cinemas
3 credit(s);
Instructor: Fabbri, Lorenzo
Description: TRANSNATIONAL NEOREALISM: ITALIAN CINEMA IN THE LIGHT OF GLOBALIZATION Drawing from recent scholarship on neorealism and more broadly from the "global turn" in cultural studies, this semester we will tackle Italian neorealism a transnational phenomenon. First we will investigate the influence of French naturalism and cinematic realism on 1930s Italian cinema. Then we will scrutinize the canonical films of Italian neorealism to grasp the crucial features of this cinematic movement and understand why it has been awarded the status of keystone in film history. Finally, we will explore the after-life of neorealism, by tracking the role that Italian films had in the emergence of new cinemas and new waves worldwide. The ultimate goal of this course is to locate Italian neorealism within wider European and global networks, while familiarizing students with the key terms, concepts, and techniques of film analysis. IN ENGLISH.

Frt 5999 Teaching of French and Italian: Theory and Practice
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.

Frt 5999 Teaching of French and Italian: Theory and Practice
3 credit(s);
Instructor: Menke, Mandy R
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.

Gay, Lesbian, Bisexual, and Transgender Studies  425 Ford Hall

GLBT 3212 Dissident Sexualities in U.S. History
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 3212;
GLBT 3305 Queer Cinema
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Swift, Jayne A
Description: What is the relationship between queer theory and queer cinema? What does it mean to call a film ?queer? or to ?queer? a film? How have GLBTQ people sought to intervene in representations of sexual and gender non-normativity through making their own films and film movements? This course offers an introduction to historical and contemporary queer cinema. We will explore what makes a particular film or media practice ?queer? and what role media production, distribution, circulation, and reception have in the process. We will examine constructions of sexuality, gender, race, class, and nation in a variety of films and investigate how transnational queer and feminist cinemas interrupt dominant ideas about sexuality, imperialism, race, gender, politics, and community. Over the course of the semester, we will trace how historical transformations in social and political movements, intellectual and theoretical traditions, filmmaking technologies, and modes of distribution have influenced and shaped media representations. This course will not serve as an advanced introduction to film studies or film production. While we will study questions of production, circulation, and reception we will do so with an eye towards what they illuminate about queer theory and historical and contemporary social and political debates.

GLBT 3404 Transnational Sexualities
3 credit(s); Credit will not be granted if credit has been received for: GWSS 3404; Meets CLE req of Global Perspectives
Instructor: STAFF
Description: The contemporary forces of cultural, economic, and political globalization continue to alter and redefine conceptualizations of sexuality and gender. How do we situate cultural, geographical, and historical understandings of sexuality while remaining attentive to homophobic, oppressive, and violent state and individual practices? We will pay particular attention to how oppression is often posited through a liberal human rights framework. This class fosters an interdisciplinary discussion through queer, feminist, and postcolonial theory, globalization studies, literature, film, and ethnography. We will examine concepts of identity, sexual practices and queerness in relation to formulations of the local-global, nations, the transnational, diaspora, community, borders, margins, urban-rural. The course is divided into three sections: representation and iconographies of transnational sexualities; issues around activism, law and citizenship; and finally a survey of current dilemmas and debates within transnational sexuality studies. This course satisfies the Global Perspectives Theme in the Liberal Education Requirements with its transnational, interdisciplinary focus on the particular issue of sexuality.

GLBT 3456W Sexuality and Culture
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Lekas, Michelle Yvonne
Description: Student may contact the instructor or department for information.

GLBT 4101 Gender, Sexuality, and Politics in America
3 credit(s);
Instructor: Esparza, Rene
Description: Student may contact the instructor or department for information.

Gender, Women, and Sexuality Studies 425 Ford Hall

GWSS 1001 Gender, Power, and Everyday Life
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

GWSS 1001 Gender, Power, and Everyday Life
3 credit(s);
Instructor: Kumar, Elakshi
Description: What do we mean by ?Sex?, ?Gender?, and ?Sexuality?? Why are some people considered ?normal? and others deemed deviant? What are the historical and cultural processes that lead to such categorizations? What is our role in constructing these social formations? Gender, Power, and Everyday Life (GWSS 1001) is an Online, 3 credit, full semester course, in which we will learn how the social categories of sex, gender and sexuality transform our understanding of our society and the world. Over the semester, we will sharpen our awareness of how gender and sexuality relate to other identity markers such as race, class, nation, dis/ability, and citizenship. We will look at a variety of texts from history, law,
popular culture, ethnography, and the news, and use feminist and queer theories to take a deeper look into how the politics of sex, gender, and sexuality inform our everyday lives. Online group work, debates, peer responses, and media sharing will help us create an exciting and interactive online learning environment, together.

**GWSS 1002 Politics of Sex**  
3-4 credit(s), max credits 4, 1 completion allowed; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences  
**Instructor:** Desai, Jigna  
**Description:** The politics of sex are around us everyday -- in our laws, in our facebook posts, and aired in heated political debates. In this course, we tackle some of the controversies associated with a variety of contemporary issues ranging from twerking and rape culture to racism and marriage. And we do it while having fun: we engage in debates, study laws, and create our own popular culture. As we do this, the course unravels how sex, gender, and sexuality, along with race and nationality, play important and complex roles in our societies and cultures. In this course we will assume that sexuality is inextricable from other categories of identity, and that sexuality is just as much about race, class, nationality, and gender as it is about sex. This course is for everyone -- psychology and engineering majors, literature and business majors. We all need to think about the politics of sex. The primary purpose of this class is to study different constructions of sex, gender, and sexuality with an emphasis on challenging the ways in which certain constructions are normalized and others marked as deviant or unnatural. In this way, we examine femininity and masculinity, homosexuality, bisexuality, and heterosexuality. In studying the relationship between what is considered normal and deviant, we can understand how our society categorizes and makes sense of individuals.  
**Style:** 40% Lecture, 10% Film/Video, 20% Discussion, 20% Small Group Activities, 10% Student Presentation.  
**Grading:** 25% mid exam, 35% final exam, 25% special projects, 15% class participation.  
**Exam Format:** Take home essay exams

**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 from the Americas and Caribbean narrate 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? These questions form the point of departure for the semester. We will read selected works of narrative non-fiction, poetry, plays, short stories, and novels to examine how authors imagine the relationship of race, sex, and gender to body, place, time, and nation. This semester's reading materials participate in fabulist traditions. Fabulist writing encompasses work broadly categorized as magical realism, science fiction, myth, fable, folklore, fantasy, horror, and cyberpunk. Such texts are often marked by unrealistic settings, plots, and characters but are nevertheless committed to real sociopolitical critique. Together we will contemplate why and how our authors employ fabulism as a metaphor for other(ed) worldliness. Major texts include: Octavia Butler's Kindred; Nalo Hopkinson's Midnight Robber; Cherrie Moraga's Watsonville; Isabel Allende's The House of the Spirits; Ana Castillo's So Far From God. Shorter selections from authors such as: Opal Palmer Adisa, Sheree Renee Thomas, Pamela Mordecai, Ursula Le Guin, Angelica Gorodischer, and Gloria Anzaldua.

**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 1005 Engaging Justice**  
3 credit(s); Meets CLE req of Civic Life and Ethics  
**Instructor:** Zita, Jacquelyn N  
**Description:** Engaging Justice: Farming and the Food Revolution The special topic of study for this semester is food, farming and the food revolution. Using this as our framework, we will focus on food justice by examining who does and does not benefit from our globalized food system and the effects of this system on our health, communities and environment. The food system will be explored from the intimacy of the alimentary canal to larger networks across race,
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.
A-F only, 3 credit(s);Credit will not be granted if credit already received for: 3002HCredit 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 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 is 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
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: Mia Mingus, a queer activist of color, gave a keynote speech at the Femme of Color Symposium, in which she challenged her audience to imagine ‘Moving Toward the Ugly: A Politic Beyond Desirability’. Following Mingus’s notion of moving beyond desirability, this course seeks to explore what emerges when art disinvests from ‘the beautiful’. In the masculinist and imperialist history of Euro-American culture, women (especially cisgendered and transgender women of color) have been the object of art?looked at, desired and represented on canvas, on screen, in words etc. Feminisms have challenged the institutionalization of such desire, its misogyny and all too often, its racism. What would it mean for art to escape ?beauty? and acceptability, museums and galleries? What possibilities arise when we move from purely aesthetic to aesthetically political? We will approach these questions by examining how the artistic representations that surround us every day, organize and represent the world. We will then consider how visual media can also allow us to see differently, and force us to critically reflect on our political beliefs and articulate them in new ways.

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, 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, 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 3306 Pop Culture Women  
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US  
Instructor: STAFF  
Description: Often eschewed as being dumbed-down and trivial, this course takes the subject of 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? is? 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?

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: The contemporary forces of cultural, economic, and political globalization continue to alter and redefine conceptualizations of sexuality and gender. How do we situate cultural, geographical, and historical understandings of sexuality while remaining attentive to homophobic, oppressive, and violent state and individual practices? We will pay particular attention to how oppression is often posited through a liberal human rights framework. This class fosters an interdisciplinary discussion through queer, feminist, and postcolonial theory, globalization studies, literature, film, and ethnography. We will examine concepts of identity, sexual practices and queerness in relation to formulations of the local-global, nations, the transnational, diaspora, community, borders, margins, urban-rural. The course is divided into three sections: representation and iconographies of transnational sexualities; issues around activism, law and citizenship; and 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 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 Chicana Studies: La Chicana in Contemporary Society
3 credit(s); Credit will not be granted if credit has been received for: CHIC 3212; Meets CLE req of Arts/Humanities; meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
Description: This class centers on Chicanas or politically defined women of the Mexican American community. Our method is interdisciplinary. It emphasizes the importance of historical context and cultural process to any discussion of the Chicana experience.

GWSS 3415 Feminist Perspectives on Domestic Violence and Sexual Assault
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Schuster, Mary Lay
Description: This course focuses on the history of and contemporary thinking about activism, social change, public policies, and legal remedies directed toward sexual assault and domestic violence in the US, particularly from the point of view of feminist perspectives. The course deals, for example, with how notions of privacy and assumptions about traditional gender roles contribute to attitudes toward stranger sexual assault and intimate partner violence. Readings in the course offer insight into early links between slavery and rape, between the temperance movement and domestic violence, and between views of child abuse and sexual abuse, as well as the increasing roles of psychiatry and social work in addressing such violence. The course traces how these historical foundations and cultural attitudes help determine contemporary responses by legal officials, and the course covers such diverse topics as the impact of HIV/AIDS on rape survivors; sexual abuse of men in prison; incest; child abuse; and sex offender treatment. Students read a memoir (Alice 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 4004 Queering Desire
3 credit(s);
Instructor: STAFF
Description: Queer theories and social practices work to question and destabilize that which is thought to be common sense or self-evident. In this class we?ll utilize queer in this way - as a method, or approach, to reconsidering what we?ve been taught to think about the personal and social politics of desire. Rather than studying desire that has been labeled ? queer,? we?ll explore what it may mean to queer desire in a range of interpersonal and socio-political contexts. Through close readings and class discussions, we will seek to recognize and contemplate the instabilities, incongruences, and incompatibilities that inform our social and personal understandings of sexual desire. We?ll examine how social structures of power and oppression shape how we think about, and act (or don't act) upon our desires. We?ll ask questions like - How do structures of power influence what is socially understood as desirable? What kinds of desires are allowed, and for whom? How are sexual desires and identities mediated through inter/national politics, economies and capital, and cultural ideologies? Most importantly, we?ll situate our inquiries around sexuality within broader critiques of social inequality.

finally a survey of current dilemmas and debates within transnational sexuality studies. This course satisfies the Global Perspectives Theme in the Liberal Education Requirements with its transnational, interdisciplinary focus on the particular issue of sexuality.
surrounding race, class, gender, and ability. Lastly, we’ll examine various modes of interdisciplinary feminist/queer theorizing that are striving to articulate a nuanced understanding of identity, culture and society. We’ll explore how queer scholarship and social action have not only tried to challenge the prejudices and inequalities of existing forms of knowledge and cultural practices, but has also tried to produce new forms of knowledge and engage in new forms of cultural praxis. Topics may include, but are not limited to: identity formation, sexual (sub)cultures, psychology of desire, histories of sexual oppression, sex education, age/questions of consent, commercial sex industry, pornography/feminist ?porn wars,? and media/advertising.

**Style:** 20% Lecture, 50% Discussion, 10% Small Group Activities, 10% Student Presentation.

**GWSS 4122 Philosophy and Feminist Theory**

3 credit(s); 8 crs in [philosophy or women’s studies] or instr consent

**Credit will not be granted if credit has been received for:** PHIL 4622;

**Instructor:** Scheman, Naomi

**Description:** This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of “post-positivist realism,” critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970’s had provided a central example for a 1993 paper of Satya Mohanty’s that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.

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

**Grading:** 55% reports/papers, 45% reflection paper. web and in-class participation can improve one’s grade

**Exam Format:** N/A

**GWSS 5122 Philosophy and Feminist Theory**

3 credit(s); 8 crs in [philosophy or women’s studies] or instr consent

**Credit will not be granted if credit has been received for:** PHIL 4622;

**Instructor:** Scheman, Naomi

**Description:** This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of “post-positivist realism,” critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970’s had provided a central example for a 1993 paper of Satya Mohanty’s that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.

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

**Grading:** 55% reports/papers, 45% reflection paper. web and in-class participation can improve one’s grade

**Exam Format:** N/A

**GWSS 8220 Seminar: Science, Technology & Environmental Justice**

3 credit(s), max credits 6;

**Instructor:** STAFF

**Description:** Biopolitics as a conceptual apparatus to describe forms of power that produce and manage populations through monitoring their “life” came into circulation largely through the work of Michel Foucault; yet clearly there is room to push on the universalism of Foucault’s framework. But how does the bios, the life, that is administered according to Foucault’s vision intersect with contemporary politics and capital in all its transnational forms? This course looks at biopolitics through the production of gendered, sexual and raced bodies across national and geographical borders. Building on a rich tradition of transnational feminist, queer Marxist, and critical race analysis of the exertion of power through life itself, we push at the limits of biopolitics as theory and ask the following questions: What bodies are deemed capable of being productive, how and where? What happens to bodies deemed unproductive or disposable? How do neoliberal ideas about individual sovereignty and freedom collide with national and global legal structures that decide on ownership of tissue, blood, bones, organs and cell lines? The seminar is interdisciplinary: we will read philosophy, migration studies, critical race theory, feminist theory, anthropology, sociology, queer and transgender studies, science and technology studies, cultural studies, fiction, political science, and economics.

**GWSS 8270 Seminar: Theories of Body: The Body as Text and Content in Law, Public Policy**

3 credit(s), max credits 6;
Instructor: Schuster, Mary Lay  
Description: This seminar explores how the body is configured in legal decisions, public policy debates, and funding and acceptance of medical research and treatment. In particular, we will look at how attitudes toward male and female bodies influence social myths and criminal categorization of domestic violence; how reproductive technologies symbolically divide or unite the maternal body and the fetal body; and how the body and parts of the body become symbols or texts for public and professional discussions of medical research and procedures. The course begins with foundational reading and discussion from the interdisciplinary work on how bodies are defined and marked, from HIV/AIDS tattoos to proposed mandatory HPV vaccination to human rights abuses in maquiladoras to definitions of disability and finally to social movements such as animal rights and environmental ethics. One part of the seminar deals with aspects of domestic violence, including the roles of prosecutors, judges, and the court system in dealing with the problem; the part of emotion and gender myths in criminal law; the recent controversies about sex offender legislation; and the language and principles articulated in historical and current court cases. Another part of the seminar deals with controversies in reproduction, from surrogates to breastfeeding to infertility treatment to homebirth and finally to unplanned pregnancies as portrayed in current films, such as Juno and Knocked Up. The final aspect of the seminar focuses on body debate in medical research and procedures, such as stem cell research, genetic counseling, chemical exposure in fetuses, and historical and current eugenics. Graduate students from all disciplinary areas are welcome. Students will have an opportunity to work on a project of interest. For more information, contact Professor Mary Schuster, mmlay@umn.edu.

GWSS 8996 Feminist Studies Colloquium  
S-N only, 1 credit(s), max credits 4, 4 completions allowed;  
Instructor: Squires, Catherine R  
Description: Student may contact the instructor or department for information.

General Dentistry 15-209 MoosT

GenD 5152 Advanced General Dentistry Seminar II  
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

GenD 5255 Advanced General Dentistry Clinic II  
S-N only, 5-15 credit(s), max credits 15, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

GenD 5262 Advanced General Dentistry Clinical Administration II  
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

GenD 5265 Advanced General Dentistry Clinic V  
S-N only, 1-15 credit(s), max credits 15, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

GenD 6152 General Practice Seminar II  
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

GenD 6255 General Practice Clinic II  
S-N only, 10-15 credit(s), max credits 15, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.

GenD 6262 General Practice Clinical Administration II  
S-N only, 5-10 credit(s), max credits 10, 1 completion allowed;  
Instructor: Gambucci, James Robert  
Description: Student may contact the instructor or department for information.
GCD 2002 Ethical and Social Challenges in Genetics
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: LeRoy, Bonnie S
Description: Genetics and genomics offer deep insights into the nature of life and provide technologies to diagnose and treat diseases, to manipulate, modify, and create animal and plant life, and to understand our origin as human beings. This course will focus on introducing, at a basic level for scientists and non-scientists, molecular biological principles and genetic technologies that are the foundation for advances in medicine and their application to society. About half of the course will focus on methods and approaches used in modern genetics and genomics and the other half on ethical and social issues that these advancements in genetics are bringing into our everyday lives. Educational materials will be highly interdisciplinary. These will include scientific review articles from leading scientific journals, newspapers, and magazines. Some readings will both introduce and teach the underlying scientific basics of genetic and genomic analysis, whereas others will highlight societal, ethical, and legal issues arising from the technology. For example, we will read "My Genome, My Self" by Steven Pinker, which is a thought provoking essay on impacts of the personal genome project on the individual. We will utilize a variety of websites that contain computer simulations or videos. Students will write two 5-page papers on current and pending social issues. The first will be on the book The Immortal Life of Henrietta Lacks by Rebecca Skloot and the second on the Hollywood movie, GATTACA. Students will actively engage each other on specific issues that relate to the lectures, readings, and group work sessions. Students will confront new dilemmas posed by these technologies, being among the first generations that have to deal with the ethical, social, and legal impacts of genetic and genomic technologies. The course examines genetic and genomic technologies and their impact on contemporary society. The course builds student understanding of the science behind genetic and genomic technologies. A students you will discuss the role that society has played in fostering the development of genetic and genomic technologies as well as the response to the adoption and use of these technologies. You will consider the impact of genetic and genomic technologies from multiple perspectives that include developers, users/consumers, as well as others in society affected by the technology. Students will develop skills in evaluating conflicting views on existing or emerging technology. As an example, the class considers the technology, logic, ethics, and policies underlying the use of animals in research. Students engage in a process of critical evaluation that provides a framework with which to evaluate new technology in the future. Grading: 2 papers (150 pts), In-class quizzes (100 pts), Problem Sets (150 pts), Blogs (100 pts)
Style: 50% Lecture, 20% Discussion, 30% Small Group Activities.
Grading: 30% reports/papers, 20% quizzes, 30% written homework, 20% other evaluation. Blogs - 20%

GCD 3022 Genetics
3 credit(s); BIOL 2002 or BIOL 1009 Credit will not be granted if credit has been received for: BIOL 4003;
Instructor: Shaw, Jocelyn E
Description: This course is designed to provide students with a working knowledge of genetics. The first part of the course
covers basic Mendelian genetics, focusing on patterns of inheritance. The middle of the course covers molecular genetics, emphasizing the mechanisms behind the storage, duplication, and utilization of information in the cell. The final section covers current genomic technology, genetic aspects of development and human disease, and the genetics of populations. The course is designed for students who are not College of Biological Sciences majors; CBS majors should take Biol4003.

**Style:** 90% Lecture, 5% Film/Video, 5% Discussion.

**Grading:** 4 exams, including the final, each worth 100 points. 4 pop quizzes, each worth 15 points, with the lowest quiz dropped.

**Exam Format:** Approximately 60 points of multiple choice, the rest short answer.

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**GCD 3033 Principles of Cell Biology**

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

**Instructor:** Porter, Mary E

**Description:** Introduction to the components and activities common to eukaryotic cells. Focus on structures such as chromosomes, membranes, organelles and the cytoskeleton, and processes including cellular communication, replication, motility, transport and gene expression. Emphasis on relevance to human health and medicine. Appropriate for non-CBS majors.

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**GCD 4161 Developmental Biology**

**3 credit(s);**

**Instructor:** Rougvie, Ann E

**Description:** This course is intended for upper level undergraduates who have had previous courses in genetics and cell biology and who have an interest in understanding developmental mechanisms. The course will present a comprehensive discussion of developmental biology with emphasis on recent findings, particularly concerning the molecular mechanisms involved. The course will focus on development in model organisms, including nematodes, fruit flies, mice, zebrafish, frogs, and chicks, as well as discussion of human development as appropriate. Students will learn fundamental regulatory mechanisms common to developmental programs in most animals, in addition to understanding the differences that exist among species. Topics to be covered include fertilization, formation of the body plan, sex determination, limb formation, regeneration, and developmental disruptions caused by teratogens. Experimental approaches to development will be emphasized. The textbook utilized will be Scott Gilbert’s, "Developmental Biology," 8th edition, 2006. The course is web-enhanced, with a course website, as well as a textbook website (http://www.devbio.com/).

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

**Grading:** 52% mid exam, 34% final exam, 14% problem solving.

**Exam Format:** Essay, some short answer.

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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:** Kirkpatrick, David T

**Description:** The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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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:** Berman, Judith G

**Description:** The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has
information about the structure of the final product and writing guides. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involve 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

GCD 4794W Directed Research: Writing Intensive
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: Kirkpatrick, David T
Description: The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involve 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

GCD 4793 Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Kirkpatrick, David T
Description: The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

GCD 4793 Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Marahrens, York H
Description: The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.
GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Starr, Tim
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

GCD 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Kirkpatrick, David T
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

GCD 5005 Computer Programming for Cell Biology
3 credit(s);
Instructor: Gardner, Melissa Klein
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, 3-6 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) A course combining Biochemistry and Medical Genetics aimed toward Medical and Genetic Counseling students. The biochemistry content covers genome organization, transcription, metabolism, nutrition, stem cell biology, cell signaling and cancer. The genetics content covers inheritance, genetic/genomic conditions, inborn errors of metabolism, cancer genetics, complex inheritance/genetic susceptibility to disease, and birth defects. The content of both disciplines is closely intertwined, such that it is not possible to divide the course into genetics or biochemistry. Meets with INMD 6802.

GCD 8103 Human Histology
5 credit(s); Undergraduate biology, chemistry, math, and physics course; instr consent Credit will not be granted if credit has been received for: GCD 6103;
Instructor: Norrander PhD, Jan Marie
Description: Student may contact the instructor or department for information.

GCD 8103 Human Histology
5 credit(s); Undergraduate biology, chemistry, math, and physics course; instr consent Credit will not be granted if credit has been received for: GCD 6103;
Instructor: Norrander PhD, Jan Marie
Description: Style: 50% Lecture, 50% Laboratory.
Grading: 44% mid exam, 44% final exam, 12% quizzes.

GCD 8151 Cell Structure and Function
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 8911 Introduction to Genetic Counseling Skills and Practice
A-F only, 3 credit(s);
Instructor: Zierhut, Heather
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: Hirsch, 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: LeRoy, Bonnie S
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.

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 5555 Basic Spatial Analysis
3 credit(s);
Instructor: Manson, Steven M.
Description: Subject. Spatial analysis is used to understand a range of human and environmental systems, their patterns
and dynamics, and their interactions with the broader world. Students. Students in this course have tended to come from across the social, natural, and information sciences with no clear majority in any one area. This distribution makes for a lively and challenging meeting of the minds. The course is oriented towards Masters, MGIS, or PhD students. Advanced undergraduates are invited to speak with the instructor to determine if they would find the course appropriate to their educational goals. Purpose. This course expands on aspects of GISc and statistics covered by previous courses. It is designed to give hands-on experience with advanced methods in geographic, spatial, and statistical research. Goals. Students who successfully complete this course will be able to use a range of spatial analysis tools to explore the patterns and dynamics of almost any problem that has a spatial element. Depending on student orientation, this course can be used to gain insight into the technical underpinnings of introductory spatial analysis, complement on-going research, or provide an applied focus for research or policy. Prior experience. Students should be proficient in GIS, basic mathematics, and standard statistical methodology including descriptive statistics and bivariate regression. As noted above in the prerequisites, this translates into having at least one statistics course and the Principles of GIS course or its equivalent. Students without this experience fare poorly in this course. Structure. This is an intensive hands-on class with a focus on reading, discussion, and applications. This translates into 30% Lecture, 20% Discussion, 50% Laboratory. Style: 30% Lecture, 20% Discussion, 50% Laboratory. Grading: 35% reports/papers, 10% class participation, 55% laboratory evaluation.

GIS 5571 ArcGIS I
3 credit(s);
Instructor: Lindberg, Mark B
Description: This is the first course in a two-course series examining ArcGIS Desktop, one of the most commonly used commercial GIS software packages. Our attention will focus on four areas: 1) an overview of ArcGIS functionality; 2) Python scripting for ArcGIS; 3) geometric transformations and map projections; and 4) data capture and editing. Students completing this course should leave with an understanding of how ArcGIS is structured, how it developed, some of the intricacies of its present design, and have the ability to continue learning on their own.
Style: 20% Lecture, 50% Laboratory, 30% Demonstration.
Grading: 20% special projects, 30% quizzes, 50% laboratory evaluation.

GIS 5573 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.  
**Description:** Student may contact the instructor or department for information.

**Geography 414 Social Sciences Building**

**Geog 1301W Our Globalizing World**  
3 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:** INSTRUCTOR: Assistant Professor Kate Derickson It is common today to talk about living in a global world and for much of our lives the world has been nothing 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 world. Geography involves more than asking `where?`, it also involves
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 Environment
Instructor: STAFF
Description: Course Instructor: Assistant Professor Nikhil Anand 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 see 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); Credit will not be granted if credit has been received for: GEOG 1403H; Meets CLE req of Biological Sciences; meets CLE req of Environment
Instructor: St. George, Scott
Description: Biogeography helps us understand how (and more importantly, why) plants and animals are distributed around the globe. Each species on our planet has its own history, its own behavior and a set of adaptive traits that allow it to flourish in certain places and under certain conditions. At the same time, plants and animals, either as individuals or as groups, are affected by their physical surroundings and by other organisms. If we want to be wise stewards of biodiversity and natural resources, it?s crucial that we understand the dynamic relationship between living things and the environment. Biogeography uses ideas from biology, geography and history to explain the panorama of life on Earth. This course provides students with a broad introduction to important concepts and issues in ecology and environmental science. Over the semester, we?ll investigate how weather and climate affects the distribution of species, how individuals interact with their own species and others, and discuss why species expand or go extinct. Within this framework, we?ll also examine the many ways humans, either as individuals or in groups, act as agents of biotic change. Most of us live in cities and other built environments, and it can sometimes be difficult to appreciate how the natural world affects our day-to-day lives. But even if we don?t realize it, all of us depend on other living things for a wide range of ecological `services?. Whether it?s providing the biological inspiration for new drugs, reducing our collective impact on the Earth?s climate or protecting our homes from floods or other natural hazards, the biosphere has an enormous impact on us all. Ultimately, if we can understand the many factors that give our planet its amazing biodiversity, we?ll be better able to plan for its future and we?ll respond more effectively when faced with environmental challenges.
Style: 60% Lecture, 40% Laboratory.

Geog 1403H Honors: Biogeography of the Global Garden
A-F only, 4 credit(s); Honors Credit will not be granted if credit has been received for: GEOG 1403; Meets CLE req of Biological Sciences; meets CLE req of Environment
Instructor: St. George, Scott
Description: Student may contact the instructor or department for information.

Geog 1403H Honors: Biogeography of the Global Garden
A-F only, 4 credit(s); Honors Credit will not be granted if credit has been received for: GEOG 1403; Meets CLE req of Biological Sciences; meets CLE req of Environment
Instructor: Griffin, Daniel
Description: Student may contact the instructor or department for information.

Geog 1425 Introduction to Meteorology
4 credit(s); High school algebra Credit will not be granted if credit has been received for: ESPM 1425; Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: STAFF
Description: 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.
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: Associate 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 1901 Freshman Seminar: Understanding Climate Change
A-F only, 3 credit(s);Meets CLE req of Environment
Instructor: Kipfmueller,Kurt
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; meets CLE req of Technology and Society
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 credit(s);Credit will not be granted if credit has been received for: GLOS 3921;Meets CLE req of Global Perspectives
Instructor: STAFF
Description: INSTRUCTOR: PROF. ARUN SALDANHA It is impossible to think about the contemporary world without the
lasting impact European culture has had on it. But what are the deeper reasons for Europe to emerge as a dominant
continent from the sixteenth century onwards? Why is it in crisis at present? Its physical, cultural, and economic geography
will provide answers. Divided by landscape, language, religion, and war, Europe is 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 unprecedented challenges, from unemployment and xenophobia to population aging 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 its complex history. This course will guide you from Europe?s physical make-up and urbanization to
the formation of nation-states and the colonization of other continents, in order to understand the crisis today.

INSTRUCTOR: PROF. ARUN SALDANHA

Style: 60% Lecture, 20% Discussion, 10% Small Group Activities, 10% Student Presentation. Discussion includes
discussion and in-class activities.

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

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**Geog 3331 Geography of the World Economy**

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

Instructor: Chang, I-Chun Catherine

Description: In this course we?ll examine cities as historical and present day reflections of society and culture.

We?ll begin with a broad overview; exploring urban origins in ancient cultures-the medieval city, colonial cities, industrial cities
and present day metropolitan areas. We?ll contemplate speculative and utopian plans and triumphant and disastrous
outcomes. In consideration of current planning trends that place the arts and creative economy at the center of urban
regeneration and vitality, we?ll draw from landscape studies in geography, as well as other cultural and art history
resources; using art as a lens from which to interpret, represent, read, and embody the city. We?ll move from the historical
(e.g. renaissance, city beautiful movement) to the political/economic (e.g. growth machine, production, creative
economies) to the planned (e.g. public art as community representation, crime deterrent or aesthetic device). So,
throughout our examination of the global evolution of cities and changing urban form we?ll continually reengage with the
ongoing critical discussion around current ?creative place making? trends in planning, urban design, and political economy.
Geog 3386 Political Ecology of North America
3 credit(s); Meets CLE req of Environment
Instructor: Braun, Bruce Philip
Description: This is an interdisciplinary course devoted to understanding the interconnections of society and environment in the North American context. In the class you will develop ways to think critically about how ecological relations are inextricably connected to social, cultural, political and economic processes, as well as with place, space and scale. You will learn to see human environments in terms of the biophysical processes that shape and sustain them, and physical environments in terms of the social, political, economic and legal practices that determine their material form. You will also learn how and why the environment has been politicized in the ways it has, and why environmental change occurs how and where it does in an age of neoliberal capitalism. The course is structured around a series of readings and case studies taken from different sites across North America, from New Orleans and Hurricane Katrina, to bioprospecting in Mexico, to conflicts over the forests of British Columbia. It will challenge you to develop a thorough understanding of the relationship between capital, state and nature, to understand the different ways that environmental movements have emerged to contest and shape environmental change, and to critically examine the intersections of race, gender and environment in particular environmental conflicts. The course meets CLE requirements for both the Environment theme and the Citizenship and Public Ethics theme.
Style: 50% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Field Trips.
Grading: 20% mid exam, 20% final exam, 45% reports/papers, 15% class participation.

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

Geog 3388 Going Places: Geographies of Travel and Tourism
A-F only, 3 credit(s);
Instructor: Saldanha, Arun
Description: One of the largest industries, tourism reveals how rapidly the world is changing. Tourism always entails an exotic sense of place, and it follows regional differences and inequalities. This course understands tourism in relation to other kinds of mobility, like commuting, shopping, pilgrimage, colonialism, migration, and even space travel. As the negative environmental and social impacts of tourism have become obvious, significant demands have emerged on its practices and policies. Investigating the landscapes and economies of cars, planes, beaches, parks, malls, and museums, we come to appreciate the unique challenges tourism poses for global society and the planet. To gain a geographical understanding of mobility we engage a range of skills: a close reading of a comic book; a museum field trip; online discussions; analyzing maps and graphs; interpreting souvenirs and personal anecdotes. On the way we visit places like Athens, the Australian outback, Mecca, Costa Rica, and the Congo. Our final destination is an informed and critical ethics of travel.
Style: 40% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Field Trips.
Grading: 20% final exam, 30% reports/papers, 25% reflection paper, 10% in-class presentation, 15% class participation.
Reflection papers = short weekly reading responses on Moodle. Class participation includes verbal report on Moodle.
Geog 3521 Digital Planet: Understanding Your World in the Information Age
3 credit(s); Meets CLE req of Technology and Society
Instructor: Harvey, Francis
Description: The information age is with us in many guises. One of the key areas we experience its impact is in the increasing use of geospatial information technologies—everything from cell phone tracking and vehicle navigation to virtual globe mapping. These technologies are often implicit but key technologies in developing the information society. For a number of reasons, our location becomes a key factor in facilitating our interactions with others. As a starting point we can distinguish two sides to this. One of the the most common geospatial information technologies, cell phones with GPS make it harder to get lost, but now the cell phone services are making also it harder to hide. How can we control access to this information? Indeed, the data used to help a cell phone customer figure out where they are can also be used by the government to find out where you have been. Justice department access to this data without probable cause has been an issue in many courts across the nation. The geospatial capabilities of cell phones and other information technologies puts us and society before many questions. What kind of control do we want over these technologies? What kind of control should we have? What kind of rights to privacy should apply to these technologies? What can we even do with these technologies? What are they? In this course, you will examine different types of these technologies and consider a range of applications as you learn about potentials, limits, and concerns about their use and ongoing developments. This course also takes up surveillance, cyberspace, and more common geospatial applications, especially those relying on cell phones.

Style: 10% Lecture, 30% Discussion, 40% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.
Grading: 50% written homework, 30% in-class presentation, 20% class participation. Grading follows qualitative criteria: - analysis and evaluation - argumentation and support - use of examples and facts - engagement with complexities - use of primary sources - use of secondary sources

Geog 3531 Numerical Spatial Analysis
4 credit(s); Credit will not be granted if credit has been received for: GEOG 5531;
Instructor: Barnes, Timothy L
Description: Student may contact the instructor or department for information.

Geog 3561 Principles of Geographic Information Science
4 credit(s);
Instructor: Bonsal, Dudley B.
Description: Student may contact the instructor or department for information.

Geog 3839 Introduction to Dendrochronology
3 credit(s);
Instructor: Kipfmuller, Kurt
Description: Student may contact the instructor or department for information.

Geog 3973 Geography of the Twin Cities
3 credit(s); Credit will not be granted if credit has been received for: GEO 1009; Meets CLE req of Social Sciences
Instructor: Pentel, Paula R
Description: 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 3993 Directed Studies
1-8 credit(s), max credits 12, 12 completions allowed;
Instructor: Simmonds, Jeanette
Description: Student may contact the instructor or department for information.

Geog 3993 Directed Studies
1-8 credit(s), max credits 12, 12 completions allowed;
Instructor: Powell, Glen L
Description: Student may contact the instructor or department for information.

Geog 3996H Honors: Senior Project Directed Research
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed; instr consent, dept consent, college consent 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: The topical focus of this course is "Oil." Thematically, however, the purpose is much broader. 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. production and consumption of oil) means we need to understand those phenomena from an integrated perspective. We need to understand though that there are profoundly different ways of achieving integrated understandings and that every "integrated" understanding has its blind spots. One of Prof. Henderson's favorite courses to teach.
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 5385 Globalization and Development: Political Economy
4 credit(s);
Instructor: Samatar, Abdi Ismail
Description: Globalization and Development is a senior/graduate course in Geography and development studies. The principal objective of the course is to train students in development theory and practice in context global transformations. What do we mean by development at the beginning of the new millennium? Are the fortunes of Third World countries improving more significantly in this more globalized world than say, fifty years ago? How are the world resources distributed, and are Third World countries gaining enhanced capacity to "catch up?" At the end of the semester, I expect students to have a strong grasp of development theory and substance. There are two parts to the course. Part one deals with the intellectual history of development theory: from colonization to globalization and what Third World societies need to do to exploit opportunities in the system and minimize ill-effects. We look at a number of country case studies to better understand the specific challenges different societies face. Format of class: lecture/seminar. Requirements: one research paper, one book review and bi-weekly reaction abstracts to key class reading, and thoughtful class participation. Textbooks: a packet of reading and several short texts.
Style: 50% Lecture, 50% Discussion.
Grading: 70% reports/papers, 30% class participation.

Geog 5393 Rural Landscapes and Environments
4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.
Geog 5561 Principles of Geographic Information Science
4 credit(s);
Instructor: Bonsal,Dudley B.
Description: Student may contact the instructor or department for information.

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 5839 Introduction to Dendrochronology
3 credit(s);
Instructor: Kipfmueller,Kurt
Description: Student may contact the instructor or department for information.

Geog 8001 Problems in Geographic Thought
A-F only, 3 credit(s);
Instructor: Klink,Katherine
Description: Student may contact the instructor or department for information.

Geog 8230 Theoretical Geography
3 credit(s);
Instructor: Saldanha,Arun
Description: Fall 2014 Geog 8230 Theoretical Geography Thinking Space after Deleuze and Guattari Arun Saldanha, saldanha@umn.edu The work of Deleuze and Guattari has been steadily gaining traction in geography and elsewhere to rethink established themes such as capitalism, the body, the nation-state, technology, human-nonhuman interactions, and urban systems, as well as to introduce new ones. But what can D&G contribute to the discipline?s claimed object, space itself? There is no doubt they have a keener sensitivity to spatial complexity than the theoretical traditions they critique: Marxism, psychoanalysis, semiotics, anthropology. However, it is rarely fleshed out what this sensitivity exactly consists of. Working out the formal characteristics of D&G's geography, if there is a consistent one at all, should be beneficial to anyone trying to adapt their notoriously baffling conceptual apparatus to their own intellectual or artistic output. Doing this in an interdisciplinary context furthermore allows considering the difficulties and limits of extending D&G's theories across disparate areas of knowledge and practice. This seminar aims to collectively understand key passages from the D&G corpus. Each week corresponds to a real-world geographical problem, such as finance capital, plate tectonics, derelict urban spaces, insurrection, and depression. Each week we read an exemplary passage of Deleuze, Guattari, or D&G, alongside and at tension with a kindred more accessible text pertaining to the same spatial thematic. By the end of the semester you?ll have a pretty good sense of the singular richness of the spatialities D&G offer. You?ll appreciate the fact they're less baffling than they appear at first sight. The seminar therefore aims to empower students as readers of contemporary continental philosophy. A Thousand Plateaus is the focus of the course. Additional readings will be by Rachel Carson, Charles Darwin, Manuel De Landa, Elizabeth Grosz, Michael Hardt & Antonio Negri, David Harvey, Henri Lefebvre, Nicole Loraux, Doreen Massey, Brian Massumi, Richard Sennett, Baruch Spinoza, Nigel Thrift, Tiqquen, Michel Tournier, Jan Zalasiewicz, and others.

Geog 8290 Seminar in GIS and Cartography
3 credit(s);
Instructor: Kne,Len
Description: Student may contact the instructor or department for information.

Geog 8291 Seminar in GIS, Technology, and Society
3 credit(s);
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: 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: McMaster, 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.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Harvey, Francis
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Henderson, George Lawlor
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Manson, Steven M.
Description: Student may contact the instructor or department for information.

Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Kipfmueller, Kurt
Description: Student may contact the instructor or department for information.
Geog 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Saldanha, Arun
Description: Student may contact the instructor or department for information.

Geog 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 8970 Directed Readings
1-5 credit(s), max credits 10;
Instructor: Griffin, Daniel
Description: Student may contact the instructor or department for information.

Geog 8980 Topics in Geography
1-3 credit(s), max credits 15, 10 completions allowed;
Instructor: Braun, Bruce Philip
Description: Student may contact the instructor or department for information.

Geog 8980 Topics in Geography
1-3 credit(s), max credits 15, 10 completions allowed;
Instructor: Anand, Nikhil
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: 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
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Geog 8990 Research Problems in Geography
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Instructor: Braun, Bruce Philip
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Instructor: Gidwani, Vinay Krishin
Description: Student may contact the instructor or department for information.

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Instructor: Harvey, Francis
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Instructor: Henderson, George Lawlor
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Instructor: Manson, Steven M.
Description: Student may contact the instructor or department for information.

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Instructor: Kipfmueller, Kurt
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Saldanha, Arun
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: Kayzar, Brenda
Description: Student may contact the instructor or department for information.

Geog 8990 Research Problems in Geography
1-5 credit(s), max credits 10;
Instructor: St. George, Scott
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: Anand, Nikhil
Description: Student may contact the instructor or department for information.
**Geog 8990 Research Problems in Geography**
1-5 credit(s), max credits 10;
**Instructor:** Derickson,Kate Driscoll
**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 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: CE 4000H;
**Instructor:** Barnes,Randal J
**Description:** Student may contact the instructor or department for information.

**GeoE 4094H Senior Honors Thesis**
A-F only, 2 credit(s);Upper div CECredit will not be granted if credit has been received for: CE 4094H;
**Instructor:** Barnes,Randal J
**Description:** Student may contact the instructor or department for information.

**GeoE 4104W Capstone Design for Geoengineering**
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 4351 Groundwater Mechanics**
A-F only, 3 credit(s);[CE 3502, [CSE upper div or grad student]] or instr consent Credit will not be granted if credit has been received for: CE 4351;
**Instructor:** Strack PhD,Otto D
**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:** Mogilevskaya,Sofia
**Description:** Student may contact the instructor or department for information.

**Geriatrics**

**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.

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### 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:** Interested in learning the language spoken by the country with the fourth largest economy in the world, a global leader in both business and engineering? Want to learn more about the rich culture and fascinating histories of German-speaking countries? The lands of fairy tales, Beethoven and Goethe, techno music, and hiking galore? <br> Come study German! German 1001 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. This course focuses on your development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the German-speaking world. The textbook, <i>Vorsprung</i>, is accompanied by an online workbook <i>(iLrn)</i>. Most of class time is spent working in pairs and small groups on a variety of activities. Since the majority of class time is devoted to speaking and listening in German, class attendance is critical. Expect an average of 1.5 hours of outside preparation for each class session hour. <br> This course is intended for students with NO previous study of German, or students who have not studied German in recent years (gap of 3 years or more). If you have more than two years of high school German completed within the last year or two, you should either register for GER 1022, which provides students with an accelerated review of GER 1001 material followed by material covered in GER 1002, or take the Entrance Proficiency Test for placement into second-year German. For further information on placement, please see your advisor or contact the Department of German, Scandinavian, and Dutch.<br>**Style:** Mostly discussion and student involvement/interaction in small-group activities.<br>**Grading:** 10% final exam, 15% reports/papers, 5% special/oral projects, 35% exams/quizzes, 35% class participation and daily homework.<br>**Exam Format:** Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

#### Ger 1002 Beginning German
- 5 credit(s);
- **Instructor:** STAFF
- **Description:** <i>Herzlich Willkommen!</i> German 1002 is intended for students who have completed German 1001 or the equivalent. German 1002 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. This course focuses on your development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the German-speaking world. Homework assignments become the basis for student-to-student interaction, small group work and role-play in class. The text for the course, <i>Wende</i>, covers speaking and writing in daily contemporary issues and stresses reading and listening strategies in language learning. Along with this textbook we use a German cultural reader called <i>Elvis in Köln</i>. By the end of the course you should be able to compare the German and American educational systems, and describe free-time activities and career choices. You will also become familiar with various contemporary social issues in the German-speaking countries. Several class sessions will help familiarize you with computer and Internet resources. Since the majority of class time is devoted to speaking and listening in German, class attendance is critical. Expect an average of 1.5 hours of outside preparation for each class session hour. For further information on placement, please see your advisor or contact the
Ger 1022 Beginning German Review
5 credit(s);
Instructor: STAFF
Description: Herzlich Willkommen! German 1022 is an intensive review course intended for students with previous experience in German, primarily those who have studied German in high school or at community colleges, or who are transfer students. If you have more than two years of high school German completed within the last year or two, you should either register for this course, which provides students with an accelerated review of GER 1001 material followed by material covered in GER 1002, or take the Entrance Proficiency Test for placement into second-year German. German 1022 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. This course focuses on your development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the German-speaking world. 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 life contexts, and the accompanying course packet provides additional materials and practice. Students will have the opportunity to participate in small group work and role-plays, and to engage in independent study to reinforce course content. Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

Ger 1003 Intermediate German
5 credit(s);
Instructor: STAFF
Description: Students in this course will be working with the course-packet Sprüngle-Online, and the accompanying listening exercises on Sprüngle-Online, short literary texts, a feature film, and online cultural exercises. Topics covered in this course will include free-time activities and travel, living situations, the German educational system and career decisions. The program has a communicative and functional orientation. German 1003 is designed to review basic German language structures and to help students extend their listening and speaking skills. Regular recycling of grammar and vocabulary encourages students to become more fluent in their use of language. Students participate regularly in conversational activities, small group work, role-plays, and internet research of cultural topics. Process-writing essays, presentations on cultural topics, and short interviews round out the course. PARTIALLY ONLINE SECTIONS: The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Most weeks will have 3 face-to-face sessions and 2 online work-days, in addition to regular homework. This course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. To help assess whether online learning is right for you, see these guides at the Digital Campus website: http://digitalcampus.umn.edu/resources/onlinelearningassessment.html.

Ger 1004 Intermediate German
5 credit(s);
Instructor: STAFF
Description: Herzlich Willkommen! German 1004 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. In this course you will discuss major themes such as modern German history, multiculturalism, and changing definitions of family in modern society. But you will also practice talking about your own studies, goals, and plans, and defending your opinions and ideas. You will read the book Am kürzeren Ende der Sonnenallee, and discuss this view of life in the former German Democratic Republic. You will participate regularly in discussions, group work and role-plays. Writing and revising essays and interviews gives you a chance to practice your writing and speaking skills in structured contexts.

P ARTIALLY ONLINE SECTIONS: The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Most weeks will have 3 face-to-face sessions and 2 online work-days, in addition to regular homework. This course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. To help assess whether online learning is right for you, see these guides at the Digital Campus website: http://digitalcampus.umn.edu/resources/onlinelearningassessment.html.

Ger 1022 Beginning German Review
5 credit(s);
Instructor: STAFF
Description: Herzlich Willkommen! German 1022 is an intensive review course intended for students with previous experience in German, primarily those who have studied German in high school or at community colleges, or who are transfer students. If you have more than two years of high school German completed within the last year or two, you should either register for this course, which provides students with an accelerated review of GER 1001 material followed by material covered in GER 1002, or take the Entrance Proficiency Test for placement into second-year German. German 1022 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. This course focuses on your development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the German-speaking world. 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 life contexts, and the accompanying course packet provides additional materials and practice. Students will have the opportunity to participate in small group work and role-plays, and to engage in independent study to reinforce course content. Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.
contemporary issues and stresses reading and listening strategies useful in language learning. Along with this textbook we use a German cultural reader called Oktoberfest. By the end of the course you should be able to discuss familiar topics, such as everyday activities, free-time occupations, or career choices, and have become familiar with some contemporary social issues in the German-speaking countries. Since the majority of class time is devoted to speaking and listening in German, class attendance is critical. Expect an average of 2 hours of outside preparation for each class session hour. For further information on placement, please see your advisor or contact the Department of German, Scandinavian, and Dutch.

**Style:** Mostly discussion and student involvement/interaction in small-group activities.

**Exam Format:** Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

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**Ger 3011W Conversation and Composition**

4 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** This course is designed to refine students' oral and written expression and aid in the development of critical analysis skills. Contemporary readings introduce important communicative modes of language (description, narrative, debate, report, text analysis), while a grammar review supports works on finer grammar points. Multi-media materials (video clips, feature films, computer resources) will complement the other instructional materials. Graded work includes active class participation, essay writing and revision, individual and group oral presentations and projects, and informal writing assignments of varying lengths.

**Style:** 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.

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**Ger 3012W Conversation and Composition**

3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Melin, Charlotte Ann

**Description:** This course is designed to help you continue your progress toward increasing proficiency in German by developing your ability to communicate with greater fluency, complexity, and control in situations where an emerging advanced oral and written expression is important. While a grammar review will support work on finer stylistic points, we will make use of a content-based approach to learning about language and critical literacy skills that recognizes that context and meaningful content are fundamental to communication for interpersonal, interpretive, and presentational purposes. During this semester we will draw on diverse contemporary texts and multi-media materials to explore contemporary green German attitudes about environmental issues, especially the humorous overview of this subject by renewable energy expert Volker Quaschning, Mueelltrenner, Muesliesser & Klimaschuetzer (2010). Graded assignments will include active class participation, work on listening skills, informal and formal essay writing (with revisions), individual and group oral presentations and projects. Arrangements will be made for one-on-one discussions with German university students to deepen your understanding of the cultural contexts that shape global perspectives about sustainability and the environment.

**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.

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**Ger 3014 German Media**

3 credit(s);

**Instructor:** Hoffman, Hilde

**Description:** LET THERE BE POP: POPULAR CULTURE IN GERMANY Throughout the last decades, there has been an extraordinary transformation of the role of popular culture, technology and the media in politics as well as in everyday life in Germany. This course will examine the changes in media & popular culture in contemporary German society. Starting with the theoretical framework of pop culture, we will explore methods of dealing with popular phenomena and reflect how interaction between popular culture and politics affected attitudes toward technology, gender relations, domestic relations and political culture. We will look at the development and legal structure of German cinema, television programs, printed and digital media. We will discuss different aspects of pop music and life style; subcultures and social movements, as well as current issues on nation and migration, memory culture and the European Union.

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

**Grading:** 30% reports/papers, 30% reflection paper, 40% in-class presentation.

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**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 Duerrenmatt. Short 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, short written responses, and student presentations

**Grading:** Requirements include a polished oral presentation (7-8 minutes) in German and three papers (4 pages each),
Ger 3510 Topics in German Studies: Idea of the "Gypsy" in German and European Culture
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Hoffmann, Hilde
Description: Currently, Germany and many other European countries are in the midst of a new wave of "antiziganist" policies and public discourses. In Germany, the debate on "poverty migration" narrowly targets people marked as "Roma." However, this is not an exclusively German trend. In Britain, in France, in Slovakia and many other countries, similar trends are occurring, up to the level of the EU, where recently the commissioner for justice opined that "poverty migration" in the EU is mostly a "Roma issue," while at the same time implementing programs for Roma inclusion. In class we will analyze the specific constructions of Roma bodies, of sites that have come to serve as symbols in the debate, and the wider European context by analyzing television and print coverage. We will ask to what degree current discourses repeat and reflect historical legacies, images and figures from the long tradition in Painting, Photography, Literature and Film symbolizing people marked as "Gypsies." What is the relation between the figure of the "Gypsy," of the "Roma" and the people marked as such? What is the function of anti-Roma stereotypes in current Germany and Europe? How can they be countered?
Style: 30% Lecture, 30% Discussion, 40% Student Presentation.
Grading: 30% reports/papers, 30% reflection paper, 40% in-class presentation.

Ger 3641 German Folklore
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Literature
Instructor: Liberman, Anatoly
Description: Folklore is a broad area, including but not limited to tales, poems, songs, ritual drama, and dance. However, this course will be limited to the study of so-called verbal folklore of the German-speaking world, rather than folk music, dances, or material culture. It pursues two goals--to introduce students to beautiful and famous tales and, while doing so, to the world of oral culture, whose main features are similar all over the world. Our main reading will be the Grimms' tales. The main medium of the course is lectures, but they will alternate with discussion. There will be a takehome midterm, a takehome final (essay questions in both); also a paper, about five pages long will be required. The course spans the areas of literature, popular culture, and, to a smaller extent, mythology, religion, and cultural anthropology. No prerequisites.
Style: 80% Lecture, 20% Discussion.
Grading: 20% mid exam, 40% final exam, 40% reports/papers.
Exam Format: Essay

Ger 3702 Beginning Middle High German
3 credit(s);
Instructor: Wakefield, Ray M
Description: Ger 5721/Ger 3702 is an introduction to the language, literature, and culture of German-speaking Europe in the Middle Ages. Selected readings will introduce the linguistic givens of Middle High German, contextualized in its relationship to Old High German and Modern Standard German. The readings will also introduce selections from some of the outstanding authors of the German High Middle Ages: the anonymous author of the "Nibelungenlied," Hartmann von Aue, Walther von der Vogelweide, Wolfram von Eschenbach, and Gottfried von Strassburg. Undergraduate students enrolled for Ger 3702 will complete session assignments, two exams, and a final project. Undergraduates may also enroll for Ger 5721 and write a research paper to complete the capstone course requirement for the GSD major. Graduate students enrolled for Ger 5721 will complete all the work assigned to the undergraduates (Ger 3702). They will also serve as mentors and peer teachers and will complete a graduate-level research paper.

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 (320 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: Interested in learning the language spoken by the country with the world's fourth largest economy, a global leader in both business and engineering? Want to learn more about the rich culture and fascinating histories of German-speaking countries? The lands of fairytales, Beethoven and Goethe, beer gardens, and hiking galore? Come study German! German 1001 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. This course focuses on your development of interpersonal
speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the German-speaking world. The textbook, "Vorsprung," is accompanied by an online workbook "iLrn." Most of class time is spent working in pairs and small groups on a variety of activities. Since the majority of class time is devoted to speaking and listening in German, class attendance is critical. Expect an average of 1.5 hours of outside preparation for each class session hour. This course is intended for students with NO previous study of German, or students who have not studied German in recent years (gap of 3 years or more). If you have more than two years of high school German completed within the last year or two, you should either register for GER 1022 which provides students with an accelerated review of GER 1001 material followed by material covered in GER 1002 or take the Entrance Proficiency Test for placement into second-year German. For further information on placement, please see your advisor or contact the Department of German, Scandinavian, and Dutch.

**Style:** Mostly discussion and student involvement/interaction in small-group activities.

**Grading:** 10% final exam, 15% reports/papers, 6% special/oral projects, 35% exams/quizzes, 35% class participation and daily homework.

**Exam Format:** Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

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**Ger 4002 Beginning German**

2 credit(s);

**Instructor:** STAFF

**Description:** "Herzlich Willkommen!" German 1002 is intended for students who have completed German 1001 or the equivalent. German 1002 is a part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. This course focuses on your development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the German-speaking world. 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 Köln." By the end of the course you should be able to compare the German and American educational systems, and describe free-time activities and career choices. You will also have become familiar with various contemporary social issues in the German-speaking countries. Several class sessions will help familiarize you with computer and Internet resources. Since the majority of class time is devoted to speaking and listening in German, class attendance is critical. Expect an average of 1.5 hours of outside preparation for each class session hour. For further information on placement, please see your advisor or contact the Department of German, Scandinavian, and Dutch.

**Style:** Mostly discussion and student involvement/interaction in small-group activities.

**Grading:** 10% final exam, 15% reports/papers, 4% special/oral projects, 30% quizzes, 28% class participation and daily homework, 11% reader and in-class assignments/quizzes, 2% self-reflection and evaluation.

**Exam Format:** Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

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**Ger 4003 Intermediate German**

2 credit(s);

**Instructor:** STAFF

**Description:** Students in this course will be working with the course-packet "Sprung" and the accompanying listening exercises on "Sprung," short literary texts, a feature film, and online cultural exercises. Topics covered in this course will include free-time activities and travel, living situations, the German educational system and career decisions. The program has a communicative and functional orientation. German 1003 is designed to review basic German language structures and to help students extend their listening and speaking skills. Regular recycling of grammar and vocabulary encourages students to become more fluent in their use of language. Students participate regularly in conversational activities, small group work, role-plays, and internet research of cultural topics. Process-writing essays, presentations on cultural topics, and short interviews round out the course. "PARTIALLY ONLINE SECTIONS:" The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Most weeks will have 3 face-to-face sessions and 2 online work-days, in addition to regular homework. This course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. To help assess whether online learning is right for you, see these guides at the Digital Campus website:

http://digitalcampus.umn.edu/resources/onlinelearningassessment.html.

**Style:** Mostly discussion and student involvement/interaction in small-group activities.

**Grading:** 10% final exam, 15% reports/papers, 6% special projects, 30% quizzes, 8% in-class presentation, 25% class participation, 6% other evaluation. Role-plays.

**Exam Format:** Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

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**Ger 4004 Intermediate German**

2 credit(s);

**Instructor:** STAFF

**Description:** "Herzlich Willkommen!" German 4004 is part of a proficiency-based program, emphasizing building skills so that you can use the language confidently and accurately in a variety of situations. In this course you will discuss...
major themes such as modern German history, multiculturalism, and changing definitions of family in modern society. But you will also practice talking about your own studies, goals, and plans, and defending your opinions and ideas. You will read the book Sonnenallee, and discuss this view of life in the former German Democratic Republic. You will participate regularly in discussions, group work and role-plays. Writing and revising essays and interviews gives you a chance to practice your writing and speaking skills in structured contexts. Books: Sprüngle 1004 Course Packet. Brussig, Thomas. Am kürzeren Ende der Sonnenallee. Easy Reader version. Dykstra-Pruim, Pennylyn and Redmann, Jennifer. Schreiben lernen: A Writing Guide for Learners of German. PARTIALLY ONLINE SECTIONS: The instruction and content are delivered by a combination of in class face-to-face meetings and a wide range of independent and collaborative online activities with short (frequent) due dates. Most weeks will have 3 face-to-face sessions and 2 online work-days, in addition to regular homework. This course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. To help assess whether online learning is right for you, see these guides at the Digital Campus website: http://digitalcampus.umn.edu/resources/onlinelearningassessment.html.

**Style:** Mostly discussion and student involvement/interaction in small-group activities.

**Grading:** 10% final exam, 10% reports/papers, 25% quizzes, 25% other evaluation. 30% class participation and daily homework. Other evaluation including interviews, listening, and reading exercises.

**Exam Format:** Exams evaluate listening, vocabulary, grammar, writing, reading, and culture.

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**Ger 4040 German Play: Oral Interpretation and Performance of German**

**1-3 credit(s), max credits 9, 3 completions allowed;**

**Instructor:** Rothe, Matthias

**Description:** Brecht's Crisis (A Research Theater). What is failure? The playwright Bertolt Brecht fails when, at a time of societal crisis in Germany's 1920s, he writes a play about crisis: about social unrest, stock exchange crashes, about greed and poverty. His play Joe Fleischhacker aus Chicago remains fragment, after years of writing and re-writing Brecht gives up on it. Yet it is perhaps in form of such a fragment, in form of a wild compilation of sketches, scenes, songs, excerpts from economic theory and philosophical reflections that the crisis is best and finally captured? The complexity of the events demanded a new form of representation. Let us unearth the productivity of Brecht's failure! This seminar will be a laboratory, working on Brecht's fragment. It will result in a public presentation, that is, it will involve playing, reading aloud, and spontaneous theorizing, even music, dancing and singing. A lot of roles are available and not everybody has to be on stage. Come and join this experiment!

**Style:** 20% Lecture, 20% Discussion, 40% Laboratory, 20% Small Group Activities. This class will involve some extra time for rehearsals, approx. 3 Saturdays and time for dress rehearsal at venue

**Grading:** 40% special projects, 30% attendance, 30% in-class presentation. There will also the possibility to write essays or a final paper instead of being a part of the acting or other creative assignments.

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**Ger 5011 Advanced Conversation and Composition**

**3 credit(s);**

**Instructor:** Ianeva-Lockney, Arsen

**Description:** Directed at advanced undergraduate students and graduate students, this course will prepare them to follow and analyze current debates in German society. The cultural focus is on the events that lead to the fall of the Berlin Wall and their representations in movies and in documentaries. The movies will be made available for viewing on the Digital Content Library of CLA, and students need to watch them as part of their preparation. Participants are also encouraged to share their personal stories, photos and memorabilia in this class in order to create a comprehensive narrative of past and current issues.

**Grading:** 25% discussions and participation, 20% individualized homework assignments with focus on syntax and morphology, 25% in-class presentations, 30% writing assignments.

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**Ger 5721 Introduction to Middle High German**

**3 credit(s);**

**Instructor:** Wakefield, Ray M

**Description:** Ger 5721/Ger 3702 is an introduction to the language, literature, and culture of German-speaking Europe in the Middle Ages. Selected readings will introduce the linguistic givens of Middle High German, contextualized in its relationship to Old High German and Modern Standard German. The readings will also introduce selections from some of the outstanding authors of the German High Middle Ages: the anonymous author of the Nibelungenlied, Hartmut von Aue, Wolther von der Vogelweide, Wolfram von Eschenbach, and Gottfried von Strassburg. Undergraduate students enrolled for Ger 3702 will complete session assignments, two exams, and a final project. Undergraduates may also enroll for Ger 5721 and write a research paper to complete the capstone course requirement for the GSD major. Graduate students enrolled for Ger 5721 will complete all the work assigned to the undergraduates (Ger 3702). They will also serve as mentors and peer teachers and will complete a graduate-level research paper.

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**Ger 5993 Directed Studies**

**1-4 credit(s), max credits 12, 12 completions allowed;**

**Instructor:** STAFF
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 (320 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.

**Ger 8010 Current Debates in Literary and Cultural Theory: Theorizing Crisis: Aspects of Weimar Philosophy**
- **3 credit(s), max credits 12, 4 completions allowed;**
- **Instructor:** Rothe, Matthias
- **Description:** The experience and the aftermath of the First World War, a revolution that failed, a democracy fragile and unwanted, continuous financial turmoil and the rise of fascism: it was against this backdrop that a particular strand of thought emerged in Germany, which has had a lasting legacy and has since enjoyed multiple comebacks. Carl Schmitt’s “The Concept of the Political”, Walter Benjamin’s “Critique of Violence”, Siegfried Kracauer’s essays, Ernst Junger’s “The Worker”, Friedrich Pollock’s “State Capitalism” and other works by authors from the so-called Frankfurt School are perhaps comparable in that they understand themselves as theorizing in times of emergency, or, as attempts to theorize crisis. This seminar seeks to do justice to the differences between these diverse approaches. It will be impossible to reduce them to equivalent expressions of a shared experience. And yet, at the same time, inquire into their commonalities beyond their obvious political affiliations. Moreover, we will try to determine what it is that constitutes their attractiveness today and discuss the appropriateness of their "application" to contemporary conditions.
- **Style:** 30% Lecture, 30% Discussion, 20% Small Group Activities, 20% Student Presentation.
- **Grading:** 30% reports/papers, 20% attendance, 20% in-class presentation, 30% class participation.

**Ger 8300 Topics in Literature and Cultural Theory: Displacing German-Jewish Transnational Culture**
- **3 credit(s), max credits 9, 3 completions allowed;**
- **Instructor:** McCormick, Rick
- **Description:** This seminar will explore marginalia as literary form. We will first consider marginalia in its most literal meaning of writing found in the margins of texts, and move to a broader consideration of the materiality of literary texts and the poetics of writing outside the margins. Examining classic cases of marginalia (Coleridge; Poe; Kafka; Benjamin), we will explore text that is both on and outside the margins; text that slips off the page; paratext; writing found outside the margins, within the parentheses, on the body, on the wall. Topics to be addressed include: the archive and marginalia; discarded texts and their afterlives; marginalia and the found text, the fragment, and translation; imprint of Talmudic text on contemporary Jewish poetic practices; hypertext as marginalia; the ways in which emendation, annotation, citation, footnotes, the index and gloss expand the frame of the text. The seminar will also consider the place of print text in Conceptual and Pop art and the relationships between word, text, and image. Readings by, among others, Benjamin, Blonstein, Borges, Calvino, Celan, Cixous, Coleridge, Derrida, Oswald Egger, Freud, Kafka, Karasick, Pessoa, Poe, Sebald, Sondheim, Benjamin Stein. Class will be conducted in English, with all readings available in English.
- **Style:** 20% Lecture, 80% Discussion.

**German, Scandinavian, and Dutch 320 Folwell Hall**

**GSD 3451V Honors Major Project Seminar**
- **A-F only, 3 credit(s); Honors student Credit will not be granted if credit has been received for: GSD 3451W; Meets CLE req of Writing Intensive**
- **Instructor:** Morris, Leslie C
- **Description:** 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:** Morris, Leslie C
- **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:** Parente Jr, James Andrew
- **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 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.

GSD 5103 Teaching of Germanic Languages
3 credit(s);
Instructor: Menke, Mandy R
Description: This seminar is designed primarily for first-time graduate TAs who will be teaching in the modern language departments. The course, which is conducted in English, draws on research, examples, and case studies relevant to classroom teaching in the second language areas of participants. Its goal is to equip new instructors with practical and theoretical knowledge about language teaching. Instructors are encouraged to develop self-reflexive practices and to create teaching materials. Discussions cover such topics as the following: theories of language acquisition, the role of contextualization, approaches to help learners develop language proficiency (in reading, writing, listening, and speaking skills), cultural competence, technology resources, assessment practices, educational outcomes, and current discussions in the U.S. and internationally about the importance of second language education.
Style: 10% Lecture, 90% Discussion.

GSD 8001 Approaches to Textual Analysis
3 credit(s);
Instructor: Rothe, Matthias
Description: Theorizing Crisis, Aspects of Weimar Philosophy<br>The experience and the aftermath of the First World War, a revolution that failed, a democracy fragile and unwanted, continuous financial turmoil and the rise of fascism: it was against this backdrop that a particular strand of thought emerged in Germany, which has had a lasting legacy and has since enjoyed multiple comebacks. Carl Schmitt's "The Concept of the Political", Walter Benjamin's "Critique of Violence", Siegfried Krakauer's essays, Ernst Junger's "The Worker", Friedrich Pollock's "State Capitalism" and other works by authors from the so-called Frankfurt School are perhaps comparable in that they understand themselves as theorizing in times of emergency, or, as attempts to theorize crisis. This seminar seeks to do justice to the differences between these diverse approaches?it will be impossible to reduce them to equivalent expressions of a shared experience?and yet at the same time inquire into their commonalities beyond their obvious political affiliations. Moreover, we will try to determine what it is that constitutes their attractiveness today and discuss the appropriateness of their "application" to contemporary conditions.
Style: 30% Lecture, 30% Discussion, 20% Small Group Activities, 20% Student Presentation.
Grading: 30% reports/papers, 20% attendance, 20% in-class presentation, 30% class participation.
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.
Style: 25% Lecture, 25% Discussion, 25% Small Group Activities, 25% Student Presentation. Class is very interactive, consisting of brief presentations about the readings by either instructors or students, followed by student-led discussion of the topic.
Grading: 30% reports/papers, 55% written homework, 15% attendance.
Exam Format: There are no exams, just short answers for questions about the reading assignments. The questions are designed to help focus the topic.

Gero 5105 Multidisciplinary Perspectives on Aging
3 credit(s);
Instructor: STAFF
Description: This course will provide an overview of aging, with a specific focus on issues of older adults in America. The course will focus on various theoretical approaches to aging services and trace the evolution of public policies and legislation affecting older adults, family caregivers, and aging services providers. The course will also focus on contemporary approaches and recommendations to help older adults live not just longer but better lives. In particular, we will discuss policies and services affecting community living, retirement, housing, aging and healthcare, recreation, long-term care, cultural differences and health disparities, financial and economic issues, and end of life care. Throughout the course, interdisciplinary perspectives will be emphasized, as contemporary services are moving toward a multi-disciplinary environment. The course will draw on the expertise of a wide array 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: This on-line course provides an introduction to 18 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. 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

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.
Grading: 15% reports/papers, 10% journal, 15% reflection paper, 10% in-class presentation, 10% class participation, 40% other evaluation.
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: Jaywant, Ketaki Umesh
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: Zhu, Tianxiao
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: McLean, Stuart J
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: Ehrenburg, Scott Michael
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: McLean, Stuart J
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: Ehrenburg, Scott Michael
Description: Student may contact the instructor or department for information.

GloS 3278 Tigers and Dragons: The Rise of the East Asian Economies, 1930-Present
3 credit(s); Credit will not be granted if credit has been received for: HIST 3478;
Instructor: Isett, Christopher Mills
Description: With a third of global Gross Domestic Production, and the world’s fastest growing economies, East Asia is arguably the most vital economic region today. In the 1950s, internal transformations set the economies of this region on a new path. Turning on state guidance, they abandoned import substitution and sought to move up the manufacturing chain through export-led development. The results were historically unprecedented rates of growth. This course examines how this was achieved and what it means for us today. We look to social and political actions to understand these economic outcomes. We look at Japan from the 1930s on; South Korea and Taiwan from their time as Japanese colonies to the present; and we look at China since 1978. Topics covered will include the legacy of colonial past, problems of late
development, post-war development strategies, statism, the rise of finance, the emergence of regional manufacturing networks, regional labor markets, import substitution, export-led growth, political economy of the NICS. We will also examine framing global developments and shocks from Bretton-Woods to the 1973 oil shock, to Plaza Accord (1985) and Reverse Plaza (1995), to the 1997 Asia financial crisis and the 2008 financial meltdown.

**GloS 3322W Social Movements, Protests, and Change**
- 3 credit(s);
- Credit will not be granted if credit has been received for: SOC 3322W;
- Meets CLE req of Civic Life and Ethics;
- meets CLE req of Writing Intensive

**Instructor:** Aminzade, Ron R

**Description:** Focusing on the origins, dynamics, and consequences of social movements, this course explores debates about the dilemmas and challenges facing movement organizations, the relationship between social movements and political institutions, and the role of social movements in bringing about social and political change. Although the course is organized around general theoretical issues, we will draw on empirical case studies of a wide variety of social movements. Students will be asked, in their written work, to apply the concepts and theories in the readings to the local social movement organization they choose for their required community service learning project. This course will be web enhanced but the URL is not yet available.

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

**Grading:** 75% reports/papers, 25% class participation. Note: To receive a grade of B or better, students must submit the ten required weekly one page reaction papers, which will not be graded.

**Exam Format:** no exams

**GloS 3401 International Human Rights Law**
- A-F only, 3 credit(s);
- Instructor: Frey, Barbara A

**Description:** International Human Rights Law is designed to introduce students to issues, procedures, and advocacy strategies involved in the promotion and protection of human rights worldwide. The class encourages students to analyze case situations, to assess relevant laws, and to evaluate the most effective methods to prevent human rights violations. Because of the evolving nature of the laws and issues in this field, students are encouraged to think critically about the ideas and practices related to human rights protection. The instructor, Barbara Frey, is a lawyer and human rights activist.

**Style:** 50% Lecture, 25% Discussion. Guest speaker, debates and other exercises

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

**Exam Format:** Short answer and essay

**GloS 3415 Global Institutions of Power: World Bank, International Monetary Fund, and World Trade Organization**
- A-F only, 3 credit(s);
- Instructor: Goldman, Michael R

**Description:** This course introduces three of the world's most powerful global institutions -- the World Bank, International Monetary Fund, and World Trade Organization. Three dimensions will be emphasized: we will look behind their closed doors to understand their daily practices; we will learn about the political, economic, and cultural terrain in which they operate; and we will observe them in key sites in the global South and North. Course themes include the business and expertise of development, poverty and wealth generation, the ideas of free market and trade, the rise of a transnational professional class and networks, and transnational social activism and networks.

**GloS 3550V Honors Course: Supervised Research Paper**
- A-F only, 4 credit(s);
- Meets CLE req of Writing Intensive
- Instructor: Skaria, Ajay

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

**GloS 3602 Other Worlds: Globalization and Culture**
- A-F only, 3 credit(s);
- Instructor: Riviere, Melissa

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

**GloS 3613V Honors: Stuffed and Starved: The Politics of Eating**
- A-F only, 3 credit(s);
- 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: Schurman, Rachel

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

**GloS 3613W Stuffed and Starved: The Politics of Eating**
- 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
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: Kindervater, Katharine Hall
Description: Student may contact the instructor or department for information.

GloS 3921 Europe: A Geographic Perspective
3 credit(s); Credit will not be granted if credit has been received for: GEOG 3161;
Instructor: STAFF
Description: 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.

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 3970 Topics in African Area Studies: Contem African Conflicts: From Somalia to S Africa
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Isaacman, Allen F
Description: This course explores the historical roots of contemporary conflicts in Somalia, South Africa, Rwanda, Liberia and Mozambique. The course begins by examining 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 complex and varied ways that colonialism precipitated or heightened ethnic, racial, religious and class divisions in Somalia, South Africa, Rwanda, Liberia and Mozambique as well as the underdevelopment and impoverishment of these five countries. Then we examine the emergence of African resistance and the struggle for liberation from the colonial powers after World War II. The second half of the course explores the problematic history of Africa's 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 read novels and view several films, including Tsotsi and Blood Diamonds.
Grading: 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.

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 4104 Crime and Human Rights
3 credit(s); SOC 1001, at least one 3xxx SOC or GLOS course recommended
Credit will not be granted if credit has been received for: SOC 4104;
Instructor: Savelsberg, Joachim J
Description: This course addresses serious violations of humanitarian and human rights law, efforts to criminalize those violations (laws and institutions), and consequences of these efforts. Examples are crimes against humanity, war crimes, and genocide. Special attention will be paid to the impact interventions have on memories of atrocities as such memories are likely to affect the future of cycles of violence. Section I provides an overview of the basic themes of this class and their interconnection: atrocities, legal and other institutional responses, and the ways responses mediate memory. Section II addresses a series of cases in which responses to past atrocities included criminal prosecution and trials: the Holocaust, the Balkan wars, and the My Lai massacre during the Vietnam War. A special focus will be on the violence in the Darfur region of Sudan. Section III will examine cases in which a major response to atrocities was truth commissions, at times combined with trials and compensation programs. Special cases include South Africa, Argentina, and post-Communist Eastern Europe. Section IV addresses the consequences of interventions and memories for ending cycles of violence.
Style: 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Student Presentation.
Grading: 50% mid exam, 35% final exam, 15% special projects.

GloS 4104H Honors: Crime & Human Rights
A-F only, 3 credit(s); At least one 3xxx SOC or GLOS course recommended
Credit will not be granted if credit has been received for: SOC 4104;
Instructor: Savelsberg, Joachim J
Description: This course addresses serious violations of humanitarian and human rights law, efforts to criminalize those violations (laws and institutions), and consequences of these efforts. Examples are crimes against humanity, war crimes, and genocide. Special attention will be paid to the impact interventions have on memories of atrocities as such memories are likely to affect the future of cycles of violence. Section I provides an overview of the basic themes of this class and their interconnection: atrocities, legal and other institutional responses, and the ways responses mediate memory. Section II addresses a series of cases in which responses to past atrocities included criminal prosecution and trials: the Holocaust, the Balkan wars, and the My Lai massacre during the Vietnam War. A special focus will be on the violence in the Darfur region of Sudan. Section III will examine cases in which a major response to atrocities was truth commissions, at times combined with trials and compensation programs. Special cases include South Africa, Argentina, and post-Communist Eastern Europe. Section IV addresses the consequences of interventions and memories for ending cycles of violence. 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: 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Student Presentation.
Grading: 50% mid exam, 35% final exam, 15% special projects.

GloS 4305 Environment & Society: An Enduring Conflict
A-F only, 3 credit(s); SOC 1001 or environmental course or instr consent
Credit will not be granted if credit has been received for: SOC 4305; Meets CLE req of Environment
Instructor: Pellow, David
Description: Student may contact the instructor or department for information.

GloS 4910 Topics in Global Studies: Never Again! Memory and Politics after Genocide
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Baer, Alejandro
Description: This course focuses on the social repercussions and political consequences of large-scale political violence, such as genocide, crimes against humanity and war crimes. How do individuals, communities and societies come to terms with these atrocities? How do successor regimes balance the demands for justice with the need for peace and reconciliation? How is public memory of the atrocities constructed? Section I provides an overview of the basic concepts and themes of this class: defining mass violence, collective memory and forgetting in post-atrocity contexts, and transitional justice. In Section II we will look at memory of the Holocaust among descendants of victims and descendants of perpetrators and its impact on the way other communities shape and represent their memories of mass violence and victimhood, i.e. their specific demands, symbolic politics and judicial strategies. In Section III we will address cases from around the globe and different historical settings, including the legacies of State terror in Latin America, the aftermath of Stalinist mass violence in Eastern Europe and American Indian struggles for memory and justice. This course will be conducted as a combined lecture and discussion course. This format will be supplemented by occasional in-class group activities.
GloS 5900 Topics in Global Studies: Managing Global Crises
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Schwartz,Eric Paul
Description: Managing Global Crises: Human Rights and Humanitarian Challenges for Policy Makers and Practitioners Mondays, 6 pm to 8:45 pm, Blegen 215 (Offered as PA 4890/GLOS 5900/POL 5810/PA 8890) Humphrey School Dean Eric Schwartz will be teaching this course. Dean Schwartz served in the White House and the State Department in the Clinton and Obama Administrations, as well as the United Nations and with Human Rights Watch. From Syria and Iraq to Somalia and Sudan, man-made disasters, which principally impact populations in the developing world, pose compelling challenges to the capacities of governments and international organizations to prevent and alleviate suffering and promote recovery. Moreover, especially after 9/11, the complex crises that result in humanitarian suffering became the focus of serious concern among policy-makers and practitioners in the United States, who began to view effective responses as important in avoiding political instability and state failure. This course, which will involve lecture and class discussion, will examine the efforts of the international community - governments, international organizations, non-governmental organizations (NGOs) and others -- to respond to humanitarian, recovery and reconstruction challenges posed by man-made disasters that impact civilians. (We will also consider disasters related to natural hazards, like storm surges and hurricanes, though those will not be a major focus of the course.) The issues and institutions that relate to humanitarian challenges and humanitarian suffering around the world are often studied separately. However, this course will take a broad and integrated approach, designed to give students a wide understanding of the lay of the humanitarian land and the questions with which policy makers and policy practitioners grapple - including those relating to security, disaster response and human rights, and the roles of international and non-governmental humanitarian organizations. In addition to focusing on the efforts of the international community, the course will examine the role and institutions of the United States government, the largest provider of international humanitarian aid. Learning objectives: Students who successfully complete the course will gain a broad understanding of the policy issues that are involved in international humanitarian response - an understanding that will integrate concepts from a range of fields - as well as knowledge of the key institutions that define and impact policy and practice in this area. Students will also develop an appreciation of the key dilemmas faced by policy-makers and practitioners involved in response to complex crises, the challenges to achieving policy and operational objectives, and the strategies for success. Global Studies: Fulfills requirements within Human Rights and Justice track as Ways of Knowing course or an elective.
Style: 25% Lecture, 70% Discussion, 5% Guest Speakers. See syllabus for description of class discussion.
Grading: 40% final exam, 25% reports/papers, 35% class participation. Report is 3-4 page policy brief based exclusively on material provided in syllabus and in class. See syllabus for specifics on class participation and other grading.
Exam Format: Essay.
GloS 5993 Directed Studies
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

GloS 5994 Directed Research
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Graduate School  316 Johnston Hall

Grad 5102 Preparation for University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Beers,Barbara Lee
Description:

Grad 5102 Preparation for University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Beers,Barbara Lee
Description:

Grad 5102 Preparation for University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Stetsenko,Elena V.
Grad 5105 Practicum in University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Meyers, Colleen Marie
Description:

Grad 5105 Practicum in University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Martin, Kate
Description: GRAD 5105 is designed to develop the skills and knowledge to teach effectively in a foreign language and in a cultural context with different expectations about learning, pedagogy, and roles of students and instructors. This course fulfills the University of Minnesota policy, English Proficiency for Nonnative English Speaking Teaching Assistants which is required for nonnative English speaking TAs whose English Language Proficiency rating is 2 or 3. As a practicum course, GRAD 5105 focuses on applying language and teaching skills in an authentic classroom situation. The course emphasizes analysis and deep understanding of cross-cultural issues that may arise while teaching at the University of Minnesota. In addition to improving their spoken academic English, students in this course will observe experienced TAs, read and discuss research on teaching in their discipline, reflect on their own teaching practice. (Prerequisite: English Language Proficiency rating of 1, 2, or 3.)
Style: 10% Lecture, 10% Film/Video, 40% Discussion, 20% Laboratory, 20% Small Group Activities. The laboratory refers to the weekly PRC component which takes place in a computer language lab.

Grad 5105 Practicum in University Teaching for Nonnative English Speakers
S-N only, 2 credit(s);
Instructor: Toscano, Caroline Frances
Description:

Grad 8101 Teaching in Higher Education
OPT No Aud, 3 credit(s);
Instructor: Wingert, Deborah Ann
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
OPT No Aud, 3 credit(s);
Instructor: Gonzalez, Anita
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
OPT No Aud, 3 credit(s);
Instructor: Alexander, Ilene Dawn
Description: Student may contact the instructor or department for information.

Grad 8101 Teaching in Higher Education
OPT No Aud, 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
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

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**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

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**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

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**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.

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**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.

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**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.

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**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.

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**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.

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**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: Park, Eugene B
Description: Student may contact the instructor or department for information.

GDes 2196 Work Experience in Graphic Design
S-N only, 1-4 credit(s), max credits 8;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

GDes 2342 Web Design
A-F only, 3 credit(s);
Instructor: Thompson, Alicia Weller
Description: Student may contact the instructor or department for information.

GDes 2342 Web Design
A-F only, 3 credit(s);
Instructor: Park, Augie
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 2361 Design Process: Photography
A-F only, 3 credit(s);
Instructor: Lopez, Angeles Valeria
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: STAFF
Description: Design and its Discontents is a prerequisite to Senior Thesis. Students are introduced to research and critical writing assignments pertinent to graphic design. Readings, lecture, discussion, and research inform written project proposals, studio production, reflection, and blogging. The course considers dialectics, theory, and ethics in the contemporary academic and professional landscape of graphic design. Assignments are referred to as research projects, which introduce principles and practices of critical and investigative research, beginning with an examination of the self as student?designer?consumer. Inquiry throughout the semester extends and addresses the overlapping realms of design, society, culture and the economy of graphic design. Themes of consumerism, sustainability, advertising message, branding and consumption are studied as they relate to graphic design.
Style: 40% Lecture, 20% Discussion, 20% Small Group Activities, 20% Student Presentation.
Grading: Attendance and participation are factors in grading but do not maintain a percent of the grade. More than 2 absences and lack of participation in discussions & presentations can result in a lower grade.
Exam Format: There are no exams in this course.

GDes 3312 Color and Form in Surface Design
A-F only, 4 credit(s);
Instructor: STAFF
Description: In this course, students will work on surface design projects involving printing, mostly on paper and fabric. All projects are centered around hands on creative production and the further development of the application of color in design. The technical emphasis of the course is screen printing, but coursework also allows students the possibility of experimentation with mixed media ?for example, letterpress, relief printing, laser printing, monoprinting, and dyeing. The final project consists of a "making" component: surface design will be applied to products. Students will engage throughout the semester with effective use of design principles, and are challenged to apply a conceptual approach to their work. Each project is evaluation in terms of design criteria as well as its production quality. Projects are tailored to suit the research interests of both graphic design and apparel design students.

GDes 3351 Text and Image
A-F only, 3 credit(s);
Instructor: STAFF
Description: Text and Image considers the inter-relationships between pictures and words and how they communicate visually and literally using design principles and elements. Emphasis is placed on series, sequences and narrative using print-oriented media. Page layout and pagination are considered in the context of publication design challenges. Some exposure to off-set printing technology (digital image file types, CMYK and Pantone color systems, paper terminology and binding structures) is imparted through an applied project.

GDes 3352 Identity and Symbols
A-F only, 3 credit(s);
Instructor: STAFF
Description: This course will build on previously learned graphic design principles including a continued investigation of typography and its application. Students will explore the representation of abstract ideas in the form of symbols for the purpose of building identity. The class will focus on the development of visual identity through a systems approach to design with application to various printed collateral. This course will prepare students to design a symbol, a logotype, stationary system and collateral products, keeping the identity consistent and intact throughout the process. Students will apply gestalt design principles, figure-ground relationships, and contrast within the structure of the grid to aid organization from piece to piece and within the whole.
Style: 25% Lecture, 40% Discussion, 30% Studio, 5% Service Learning.
Grading: 90% special projects, 5% attendance, 5% class participation.

GDes 3353 Packaging and Display
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: Lund, Curt
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: 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
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 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: Park, Eugene B  
Description: Student may contact the instructor or department for information.

GDes 4193 Directed Study in Graphic Design  
A-F only, 1-4 credit(s), max credits 8;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196
Instructor: Hokanson, Brad
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196
Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Martinson, Barbara Elizabeth
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196
Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Waldron, Carol C
Description: Student may contact the instructor or department for information.

GDes 4196 Internship in Graphic Design
S-N only, 1-3 credit(s), max credits 3, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196
Credit 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 4196
Credit 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 4196
Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Park, Eugene B
Description: Student may contact the instructor or department for information.
sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: DHA 4196
Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Jasper,Daniel
Description: Student may contact the instructor or department for information.

GDes 4343 Data Visualization I: Mapping Information
A-F only, 3 credit(s);
Instructor: Park,Eugene B
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
A-F only, 1-4 credit(s), max credits 8;
Instructor: STAFF
Description: This offering of Advanced Design Material Topics will offer students opportunities to design and screen print traditional printed products, such as books, stationery, decorative papers and other paper or fabric products. Students will also be encouraged to pursue individualized projects in screenprinting, letterpress, and/or bookmaking based on personal objectives as negotiated with the instructor.

GDes 4361W Thesis Studio and Writing
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: STAFF
Description: Senior Thesis and Writing uses writing, reading, researching and critical decision making to propose a comprehensive senior thesis project. A 'writing intensive' course, students will do different types of writing to give their concepts intellectual muscle: reflection, criticism, research, and through the design of a book of their writings, design authorship. Part seminar, part studio, Senior Thesis and Writing precedes Senior Thesis and Exhibition.

GDes 4362 Senior Thesis and Exhibition
A-F only, 4 credit(s);
Instructor: Jasper,Daniel
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
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: Park, Eugene B
Description: Student may contact the instructor or department for information.

GDes 5193 Directed Study in Graphic Design
A-F only, 1-4 credit(s), max credits 8;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

GDes 5341 Interactive Design
A-F only, 3 credit(s); [[2334 or 2342], design minor] or graphic design major or grad student or instr consent credit will not be granted if credit already received for: 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 only, 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 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Hokanson, Brad
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Martinson, Barbara Elizabeth
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Waldron, Carol C
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Chu, Sauman
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Boyd Brent, James W
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: McCarthy, Steven J
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Park, Eugene B
Description: Student may contact the instructor or department for information.

GDes 8192 Readings in Graphic Design
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Jasper, Daniel
Description: Student may contact the instructor or department for information.

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

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

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

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

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

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

GDes 8193 Directed Study
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;
Instructor: Park, Eugene B
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: Park, Eugene B
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: Park, Eugene B
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.

**Grk 3993 Directed Studies**  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Gallia, Andrew B  
Description: Student may contact the instructor or department for information.

**Grk 3993 Directed Studies**  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Cole, Spencer E  
Description: Student may contact the instructor or department for information.

**Grk 4951W Major Project**  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Sellew, Philip  
Description: Student may contact the instructor or department for information.

**Grk 5003 Intermediate Greek Prose: Graduate Student Enrollment**  
3 credit(s); Grade of at least [C- or S] in [1002 or 5001] or [instr consent, grad student] credit will not be granted if credit already received for: Grk 3113 Credit will not be granted if credit has been received for: GRK 3003;  
Instructor: Culkick, Rachael  
Description: Student may contact the instructor or department for information.

**Grk 5200 Biblical Greek**  
3 credit(s), max credits 6;  
Instructor: STAFF  
Description: The Gospel of Mark, once characterized as a shorter version of the Gospel of Matthew, is now considered one of the more complex and ambiguous narratives about Jesus. Commonly recognized as the earliest of the surviving Gospels, Mark's Jesus is action-oriented, compassionate, fiery, smart, possessed (by the Spirit of God), abandoned, misunderstood, condemned, and shamefully killed. This course will provide an opportunity to read this fascinating story in Greek in a detailed and in-depth manner, but it will also allow for considerable discussion of the interpretive possibilities of the story within its wider cultural setting (Jewish, Greek, and Roman). Taught by Prof. Stephen Ahearne-Kroll.  
Style: Interactive translation of Mark and related Greek literature, and ongoing discussion of the interpretive issues that arise from a close reading of the text in its cultural context.  
Grading: 100% Papers and in-class translation/discussion

**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
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 8910 Seminar: Commentary Writing
3 credit(s), max credits 30, 10 completions allowed;
Instructor: Olson, S. Douglas
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 credit(s);
Instructor: Pieczkiewicz PhD, David Sean
Description: Student may contact the instructor or department for information.

HInf 5436 AHC Informatics Grand Rounds
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
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: 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, 1 credit(s);
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 5502 Programming Essentials Python 3
S-N only, 1 credit(s), max credits 2, 1 completion allowed;
Instructor: Pieczkiewicz PhD, David Sean
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 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: LaVenture,Marty
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Westra,Bonnie L.
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Adam,Terrence Joseph
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Pakhomov,Serguei V
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Ellis,Lynda B
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Pieczkiewicz PhD,David Sean
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Finkelstein,Stanley M
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Gatewood PhD,Lael Cranmer
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Speedie,Stuart M
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Chute,Christopher G
Description: Student may contact the instructor or department for information.
HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Parente, Stephen T
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Khairat PhD, Saif
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Simon, Gyorgy Janos
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Delaney, Connie White
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Zhang, Rui
Description: Student may contact the instructor or department for information.

HInf 8492 Advanced Readings or Research in Health Informatics
OPT No Aud, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Chi, Chih-Lin
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: LaVenture, Marty
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Westra, Bonnie L.
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Adam, Terrence Joseph
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Pakhomov, Serguei V
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Ellis, Lynda B
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Pieczkiewicz PhD, David Sean
Description: Student may contact the instructor or department for information.
HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Finkelstein, Stanley M
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Gatewood PhD, Lael Cranmer
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Speedie, Stuart M
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Chute, Christopher G
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Parente, Stephen T
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Khairat PhD, Saif
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Simon, Gyorgy Janos
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Delaney, Connie White
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Zhang, Rui
Description: Student may contact the instructor or department for information.

HInf 8770 Plan B Project
No Grade, 4 credit(s);
Instructor: Chi, Chih-Lin
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.
HSM 3521 Health Care Delivery Systems
A-F only, 3 credit(s);
Instructor: McClernon,Susan Elizab
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. Students explore health care delivery systems including a review of health economics, third party and public reimbursement, and contemporary trends in health care organizations, management and administration. Regulations, standards, quality assurance, accreditation and ethical issues are considered in the context of contemporary medical practice. Future implications for the health care providers and professionals, patients and families, communities, and international health are included in this course.

HSM 4561 Health Care Administration and Management
A-F only, 3 credit(s);
Instructor: Kenney,Bill
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.
Style: Online
Grading: See attached syllabus

HSM 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: 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 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.
Hebr 3101 Intermediate Biblical Hebrew I
4 credit(s);
Instructor: Levinson PhD,Bernard M.
Description: This course has three aims: (1) to consolidate the student's basic mastery of the distinctive grammar, syntax, and vocabulary of Biblical Hebrew; (2) to provide a transition to reading actual biblical texts; and (3) to expose students to the complete range of literary genres in the Hebrew Bible. In practical terms, we will complete Lambdin's textbook and then move onto the intermediate level textbook by Ehud Ben Zvi. In that context, we will read biblical narrative, law, prophecy, and poetry. Literary and exegetical issues will regularly form part of classroom discussion, as will matters of Israelite religion. Students will be introduced to the use of lexicons, concordances, and grammars. In the final section of the course, students will address the source-critical analysis of the Pentateuch and come to see how biblical law provides a model for religious change and intertextuality. Important: This course presupposes successful completion of the first year course in Introductory Biblical Hebrew (Hebr 1101/1102. Required Texts: Ehud Ben-Zvi, Readings in Biblical Hebrew: An Intermediate Textbook (New Haven: Yale University Press, 1993). ISBN 0-300-05573-0. Thomas O. Lambdin, Introduction to Biblical Hebrew (New York: Scribners, 1971). H. G. M. Williamson, Guide to Lambdin's Introduction to Biblical Hebrew (Sheffield: JSOT Press paper). Hebrew Bible (see recommended scholarly edition by Elliger and Rudolph below).
Style: 75% Lecture. Discuss and correct homework assignments
Grading: 25% mid exam, 30% final exam, 10% reports/papers, 20% quizzes, 15% class participation.
Exam Format: Translations from Hebrew to English and vice versa

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 studentCredit will not be granted if credit has been received for: HEBR 1001;
Instructor: Schneller,Renana Segal
Description: Modern Israeli Hebrew seeks to serve several kinds of students. Typically, students in this course present a wide variety of backgrounds and interests, which include Jewish, or Israeli cultural studies, archaeology, linguistics, travel or work in Israel, and biblical studies. This is a course for complete beginners. You will learn basic listening, speaking, reading and writing skills with stress on proficiency in communication. Cultural materials are incorporated. The course serves as a good base for subsequent work in biblical Hebrew. The difference between this course and Hebr 1104, Biblical Hebrew, is that this course has a spoken, conversation component and prepares students to read texts without the diacritic marks. (This reading skill is necessary for those interested in reading Hebrew journal articles and post-biblical Hebrew commentaries.) The pronunciation of Hebrew taught will be the same in both courses.

Hebr 4011 Intermediate Hebrew I
3 credit(s);Grade of at least [C- or S] in [1002 or 4002] or instr consent Credit will not be granted if credit has been received for: HEBR 3011;
Instructor: Schneller,Renana Segal
Description: 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.
Instructor: Levinson PhD, Bernard M.
Description: This course has three aims: (1) to consolidate the student's basic mastery of the distinctive grammar, syntax, and vocabulary of Biblical Hebrew; (2) to provide a transition to reading actual biblical texts; and (3) to expose students to the complete range of literary genres in the Hebrew Bible. In practical terms, we will complete Lambdin's textbook and then move onto the intermediate level textbook by Ehud Ben Zvi. In that context, we will read biblical narrative, law, prophecy, and poetry. Literary and exegetical issues will regularly form part of classroom discussion, as will matters of Israelite religion. Students will be introduced to the use of lexicons, concordances, and grammars. In the final section of the course, students will address the source-critical analysis of the Pentateuch and come to see how biblical law provides a model for religious change and intertextuality. Important: This course presupposes successful completion of the first year course in Introductory Biblical Hebrew (Hebr 1101/1102. Required Texts: Ehud Ben-Zvi, Readings in Biblical Hebrew: An Intermediate Textbook (New Haven: Yale University Press, 1993). ISBN 0-300-05573-0. Thomas O. Lambdin, Introduction to Biblical Hebrew (New York: Scribners, 1971). H. G. M. Williamson, Guide to Lambdin's Introduction to Biblical Hebrew (Sheffield: JSOT Press paper). Hebrew Bible (see recommended scholarly edition by Elliger and Rudolph below).

Style: 75% Lecture. Discuss and correct homework assignments
Grading: 25% mid exam, 30% final exam, 10% reports/papers, 20% quizzes, 15% class participation.
Exam Format: Translations from Hebrew to English and vice versa
3 credit(s); Grad student, [4002 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 3021;
Instructor: Bazaz, Abir Bashir
Description: Student may contact the instructor or department for information.

HnUr 4005 Advanced Hindi-Urdu I
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: STAFF
Description: Guided individual reading of Hindi texts. The focus differs from student to student, from short-story to novel, drama and poetry. Various genres of Hindi literature are studied from a variety of disciplinary perspectives: linguistic, literary and socio-cultural. Directed Studies in ALL and Asian languages are restricted to very special conditions, with the particulars established by the individual teacher upon department approval. Note: Directed Studies cannot be used to fulfill the core requirements of either the Major or Minor.
Style: one hour consultation/week
Grading: 100% special projects.

History
1110 Heller Hall

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: Student may contact the instructor or department for information.

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

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: Matar, Nabil I
Description: The course covers the history of western civilization from its beginnings in Mesopotamia until the medieval period in Europe. It introduces students to key beliefs, cities, texts, and structures associated with the peoples of the ancient near east, Egypt, and the Hellenic Aegean. With the beginning of the Common Era, the course turns to the role of the monotheistic tradition and its scriptural legacy. It then focuses on the new institutions of Roman government and empire and the impact they had on the consolidation of Charlemagne’s Holy Roman Empire. Students learn about the division of power between the papal and monarchical institutions, the agrarian and commercial changes that occurred, the
developments of new technologies, and the maritime expansions in the Mediterranean and beyond. The course presents a chronological narrative, from around the third millennium BCE to the period after the Black Death of the mid-fourteenth century, and covers a geography that extends from the Euphrates to the Thames, and from Arabia to Iberia. Alongside their study of a history textbook, students read from primary sources in historiography, theology, literature, law, and philosophy. These texts serve as documents that link the historical events with the intellectual expressions from the laws of Hammurabi to the architecture of medieval cathedrals: Lynn Hunt et als., The Making of the West: Peoples and Cultures, vol. I ? to 1740; and Sources of the Making of the West, vol. 1 - to 1740 ed. Katharine J. Lualdi. The course emphasizes the continuity in western civilization and shows how many of the ideas, social customs, and political theories of the past remain present in the modern world. Along with a midterm and a final, students write a research paper, submitting a rough draft for comments and then a corrected final version.

Hist 1301W Authority and Rebellion: American History to 1865
4 credit(s);Fr or soph or non-hist majorCredit will not be granted if credit has been received for: HIST 1301V;Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Roberts,Evan
Description: This innovative course uses the themes of "authority" and "rebellion" to explore American history from the early colonial period through the Civil War. It offers a four-credit writing-intensive investigation of three tumultuous centuries of conflict and change. How did people envision and struggle for a "new world order"? Whose hopes were realized, and whose were thwarted? Lectures and discussion sections are organized around significant themes such as the role of religion and challenges to religious authority, the transition to capitalism; native peoples' negotiation of the European presence, the meanings of ?liberty? over time, and the ongoing existence of slavery in American life. Lectures and readings focus on close examination of crucial episodes that illuminate these themes. Throughout, we will situate our analysis in the global context from which the United States emerged. We will examine how historians use evidence to produce knowledge about the past, and we will explore the value and the limitations of historical sources. Students will write short essays (3-4 pages) on a number of the themes, one short research paper, and take periodic quizzes on the course materials.

Hist 1301W Authority and Rebellion: American History to 1865
4 credit(s);Fr or soph or non-hist majorCredit will not be granted if credit has been received for: HIST 1301V;Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Deutsch,Tracey A
Description: This innovative course uses the themes of "authority" and "rebellion" to explore American history from the early colonial period through the Civil War. It offers a four-credit writing-intensive investigation of three tumultuous centuries of conflict and change. How did people envision and struggle for a "new world order"? Whose hopes were realized, and whose were thwarted? Lectures and discussion sections are organized around significant themes such as the role of religion and challenges to religious authority, the transition to capitalism; native peoples' negotiation of the European presence, the meanings of ?liberty? over time, and the ongoing existence of slavery in American life. Lectures and readings focus on close examination of crucial episodes that illuminate these themes. Throughout, we will situate our analysis in the global context from which the United States emerged. We will examine how historians use evidence to produce knowledge about the past, and we will explore the value and the limitations of historical sources. Students will write short essays (3-4 pages) on a number of the themes, one short research paper, and take periodic quizzes on the course materials.

Hist 1534 Introduction to Jewish History and Civilization
3 credit(s);Credit will not be granted if credit has been received for: JWST 1034;Meets CLE req of Historical Perspectives
Instructor: Paradise,Natan
Description: Student may contact the instructor or department for information.

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: Student may contact the instructor or department for information.

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: Bachrach, Bernard S
Description: This lecture course begins with the Decline and Fall of the Roman Empire and covers such topics as the development of Christianity, the Muslim invasions, the Merovingians, the Carolingian empire, the Crusades, the making of England and France, the German Empire, the Spanish Reconquista, the Hundred Years War, and the Black Death. It ends with the Renaissance. Political, Military and Religious history is the major focus of this course.
Style: 75% Lecture, 25% Discussion.
Grading: 25% mid exam, 45% final exam, 30% reports/papers. Study lists will be distributed prior to exams.
Exam Format: Identifications essays and longer essays.

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: Karras, Ruth Mazo
Description: Pre-modern Britain contributed much to the English-speaking world: language, law, representative institutions, folktales, family and household structures, and much more. But these cultural developments were not uncontested in their own time. The "Britain" of later centuries, whose empire made such an impact on the entire world, grew out of a complex mixture of cultures: Celtic, Roman, Christian, Anglo-Saxon, Viking, Norman. In tracing the British Isles from prehistoric times until the mid-seventeenth century, this class focuses on cultural interactions and the development of complex identities as they changed over time. The course contributes to your liberal education through encouraging you to think critically about societies and cultures different from your own and to analyze texts and construct your own arguments. Through recognizing that the society from which we get many of our institutions is nevertheless different in many ways from our own, you will learn to reflect on the antecedents and the unique characteristics of the political, economic, and cultural situations in which you find yourself today and will find yourself throughout your life. Through critical reading and analysis of texts you will gain practice in thinking through issues for yourself, a skill that will be important in whatever life path you choose.

Hist 3212 Dissident Sexualities in U.S. History
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: AMST 3212;
Instructor: Murphy, Kevin P.
Description: 

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 3281 European Intellectual History: The Early Modern Period, Antiquity to 1750
3 credit(s); Credit will not be granted if credit has been received for: CSCL 3281;
Instructor: Shank, J.B
Description: This course is part I of a two-semester introduction to modern European intellectual history. It will cover the period that stretches from the Antique beginnings of modern European thought (Socrates, etc.) up to the eighteenth century. The course will study thinkers such as Plato, Aristotle, Paul, Augustine, Aquinas, Machiavelli, Galileo, Descartes, Bacon, Spinoza, Leibniz, and Newton. Topics will range from the relationship between myth and philosophy in Antiquity, to the role of Christianity and Islam as new philosophical-religious programs, and the connection between the global expansion of Europe after 1492 and the rise of modern science and philosophy. Readings will be drawn from the original philosophical texts of the historical figures we will study, and the class will combine lectures with intensive discussion. Students will be asked to write short weekly papers analyzing the texts they are reading, and longer critical essays as their primary written assignment. The second half of this survey, which spans the period from the eighteenth-century to the present, will be offered in spring 2015, permitting students to pursue the whole sequence in one academic year.
Style: 60% Lecture, 40% Discussion.
Grading: 60% reports/papers, 25% written homework, 15% class participation.

Hist 3347 Women in Early 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

**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 3417 Food in History

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

### Hist 3423 Central American Revolutions

**Description:** Throughout the 1970s and 1980s, civil war and political violence swept the Central American isthmus. In an attempt to understand both the domestic and international factors that contributed to this upheaval, this course will examine the social, political, and economic issues that have shaped Central American history for nearly two centuries. We will focus primarily on the influences of colonial histories, capitalist development, ethnic and racial conflict, foreign intervention, the Catholic Church, and civil war throughout the region. We will emphasize both nation-state formation from the perspective of six independent countries (El Salvador, Guatemala, Honduras, Panama, Costa Rica, and Nicaragua), and broader region-wide experiences around export capitalism, military interventions, armed uprisings, popular protest, emigration, and ethnic conflict. The course is organized around these two major approaches. We will begin with a comparative region-wide perspective as, "The Isthmus of Central America: Colonization, Revolution, and the Struggle for Autonomy." We will then focus on the six independent nations in the course section called, "The Nations of Central America: Independence, Nationalism, and the Struggle for Citizenship."

**Style:** 70% Lecture, 30% Discussion.
**Grading:** 25% mid exam, 20% final exam, 25% reports/papers, 25% class participation.
**Exam Format:** essay exams

### Hist 3432 Modern Africa in a Changing World

**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 3436 Contemporary African Conflicts: From Somalia to South Africa**
- 3 credit(s); Credit will not be granted if credit has been received for: AFRO 3436;
- Instructor: Isaacman, Allen F
- **Description:** This course explores the historical roots of contemporary conflicts in Somalia, South Africa, Rwanda, Liberia and Mozambique. The course begins by examining 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 complex and varied ways that colonialism precipitated or heightened ethnic, racial, religious and class divisions in Somalia, South Africa, Rwanda, Liberia and Mozambique as well as the underdevelopment and impoverishment of these five countries. Then we examine the emergence of African resistance and the struggle for liberation from the colonial powers after World War II. The second half of the course explores the problematic history of Africa's 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 read novels and view several films, including Tsotsi and Blood Diamonds
- **Grading:** 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.

**Hist 3444 Chicana and Chicano History: 1821-1945**
- 3 credit(s); Credit will not be granted if credit has been received for: CHIC 3444; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
- Instructor: Patino Jr, Jimmy Charles
- **Description:** Student may contact the instructor or department for information.

**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: Onishi, Yuichiro
- **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 3476 War and Peace in Japan Through Popular Culture
A-F only, 4 credit(s); Credit will not be granted if credit has been received for: ALL 3457;
Instructor: Mizuno, Hiromi
Description: This history course examines issues related to war and peace in twentieth-century Japan by using animation films and comics. The course is divided into two separate parts. The first looks at how animation was used for war propaganda during WWII in Japan and its then enemy country, the US. The second part explores three key issues that have defined discourse of war and peace in postwar Japan: 1) memory of WWII; 2) the pacifist Constitution; and 3) national security and Self-Defense Force (SDF). We will be reviewing films every two weeks or so. There will be a brief lecture for each film and theme. No prerequisite. This is not a history of anime or manga.
Style: 30% Lecture, 30% Discussion. film viewing
Grading: 55% reports/papers, 25% class participation, 20% other evaluation. film and comics analysis assignment
Exam Format: essay

Hist 3478 Tigers and Dragons: The Rise of the East Asian Economies, 1930-Present
3 credit(s); Credit will not be granted if credit has been received for: GLOS 3278;
Instructor: Isett, Christopher Mills
Description: With a third of global Gross Domestic Production, and the world's fastest growing economies, East Asia is arguably the most vital economic region today. In the 1950s, internal transformations set the economies of this region on a new path. Turning on state guidance, they abandoned import substitution and sought to move up the manufacturing chain through export-led development. The results were historically unprecedented rates of growth. This course examines how this was achieved and what it means for us today. We look to social and political actions to understand these economic outcomes. We look at Japan from the 1930s on; South Korea and Taiwan from their time as Japanese colonies to the present; and we look at China since 1978. Topics covered will include the legacy of colonial past, problems of late development, post-war development strategies, statism, the rise of finance, the emergence of regional manufacturing networks, regional labor markets, import substitution, export-led growth, political economy of the NICs. We will also examine framing global developments and shocks from Bretton-Woods to the 1973 oil shock, to Plaza Accord (1985) and Reverse Plaza (1995), to the 1997 Asia financial crisis and the 2008 financial meltdown.

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
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

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**Hist 3502 Ancient Israel: From Conquest to Exile**

3 credit(s); Credit will not be granted if credit already received for: ANE 3502/5502, RelA 3502/5502

Credit will not be granted if credit has been received for: CNES 3502;

**Instructor:** von Dassow, Eva

**Description:** Israel and Judah were not states of great importance in the ancient Near East. Their population, territory, and economy were small, and they could not resist conquest by larger, more powerful states like Assyria and Rome. So why is their history significant still? The historical experiences of the people of ancient Israel and Judah were transmogrified in literary form into the Hebrew Bible (Old Testament), which became the foundation and wellspring for much of Western and Islamic civilization. Innumerable aspects of modern history and culture are predicated on some element of Israel's ancient past, as mediated to us through the Bible; so it behooves us to understand that past. But the Bible is a religious work, not a transcript of events, and it is not the only source of information about ancient Israel. Archaeological excavations have revealed the physical remains of the cultures of Israel and neighboring lands, as well as bringing to light documents, inscriptions, and literary works produced by these cultures. This course treats the history of ancient Israel and Judah from the Late Bronze Age through the period of Roman rule, on the basis of archaeological, epigraphic, and literary sources. Historical study entails inquiring into the ideology of the sources, including the Bible. Implicit in the methods of inquiry are questions about how historical knowledge is created. Students taking the course for graduate credit will do additional reading and a research paper.

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

**Grading:** 20% final exam, 45% reports/papers, 20% quizzes, 15% class participation.

**Exam Format:** Essays, short IDs, maps

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**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:** Lummus, Wesley W

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

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**Hist 3534 Introduction to Jewish History and Civilization**

3 credit(s); Credit will not be granted if credit has been received for: JWST 1034; Meets CLE req of Historical Perspectives

**Instructor:** Paradise, Natan

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

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**Hist 3609 Military History of Medieval Western Europe**

3 credit(s);

**Instructor:** Bachrach, Bernard S

**Description:** This course deals with the period from the gradual dissolution of Roman imperial power in the West during the fifth century to the development of gunpowder weapons in the fifteenth century. The immense significance of the military history of this thousand year adventure is evidenced in numerous ways as the governments of western Europe expended the greatest part of their surplus human and material resources on preparation for way, war and its aftermath. The centrality of military matters is expressed culturally in every genre of literature. Violence and its deterrence are fundamental themes in medieval legislation and in religious rites. Images of armed conflict are prominent in medieval art forms from manuscript illustration to the sculptures of church facades. The results of the massive expenditure on the medieval "military-industrial" complex can still be seen in the remains of thousands of fortified cities, fortresses and other strongholds that still dominate the historical landscape of Europe. In this course, we will work with the available historical and archaeologicl sources to reconstruct the strategy, military operations, battle tactics, and combat techniques developed throughout the medieval millennium within their particular historical contexts.

**Style:** 65% Lecture, 35% Discussion.

**Grading:** 20% mid exam, 40% final exam, 30% reports/papers, 10% class participation.

**Exam Format:** short and long essays

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**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:** Lower, Michael
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: 45% Lecture, 10% Film/Video, 45% Discussion.

Grading: 20% mid exam, 30% final exam, 20% reports/papers, 20% written homework, 10% attendance. Informal writing assignments and class participation

Exam Format: Essay

Hist 3616 France in the Middle Ages
3 credit(s);
Instructor: Reyerson, Kathryn L
Description: France was at the forefront of European development in the Middle Ages. It was the land of Gothic cathedrals and the site of the Hundred Years War. This course examines the development of the kingdom of France from the tenth through the mid-fifteenth centuries, focusing on the reigns of the Capetian and Valois dynasties that include Eleanor of Aquitaine and Saint Louis, as well as Charles VII. We will explore life in medieval France through texts, film, and PowerPoints to trace the foundation of the country we know today as an arbiter of taste and a center of culture. Along the way we will deal with murder, mysteries, and misconceptions.

Style: 60% Lecture, 20% Film/Video, 20% Discussion.
Grading: 25% mid exam, 30% final exam, 30% reports/papers, 15% class participation. ABCD..F and S/N. S requires a C.
Exam Format: short and long essay

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: Pekel, Bryan D
Description: Student may contact the instructor or department for information.

Hist 3706 Baroque Rome: Art and Politics in the Papal Capital
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335; Meets CLE req of Historical Perspectives
Instructor: Ostrow, Steven F
Description: This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

Hist 3729 Nazi Germany and Hitler's Europe
3 credit(s); Credit will not be granted if credit has been received for: JWST 3729;
Instructor: Cohen, Gary B.
Description: Student may contact the instructor or department for information.

Hist 3731 Modern France and Its Empire: Identity, Citizenship and the State 1780 to the Present
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
Instructor: Lorcin, Patricia M.E.
Description: The French revolution of 1789 was a turning point in European history; its impact and legacy were global. Starting with this event the course will trace the social, political and cultural history of France and its empires. It will examine why events in France had widespread repercussions and how France became an important player in the global context during the 19th and 20th centuries.
Hist 3797 History of Population
3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Hacker, J. David
Description: Student may contact the instructor or department for information.

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 3809 The Peoples of Revolutionary America
3 credit(s);
Instructor: Fischer, Kirsten
Description: The United States, with its 18th-century war for independence and its resulting Constitution, has been hailed as a harbinger of democracy and as a role-model revolution. But what, precisely, was revolutionary about the young United States, and what were the limits of this experiment in self-governance? This course uses the tools of social, political, legal, and intellectual history to explore the making of the United States during a turbulent revolutionary age. We will discuss long-standing social tensions within the colonies in addition to the well-known resentment of British colonial policies that variously shaped hopes for political change. Multiple perspectives and shifting alliances made for a complex political landscape, and many Americans experienced the revolution as a civil war of sorts. We will examine how political protests and propaganda sought to forge a unified patriot front out of a much more complicated reality. Moving beyond the war years, the course focuses on new governmental structures and on the economic and political grievances that gave rise to rebellions within the young United States. The course also places the early Republic within the transatlantic context of revolutionary France and Haiti, both of which served as testing grounds for the U.S. commitment to the ideals of a democratic republic. One note of clarification: this course examines with relative brevity the topics that used to dominate courses on the American Revolution, namely military history and biographies of the political leaders of the new nation. Instead, we will focus on the grievances of ordinary people and on the larger international context to ask: Who participated and why? What did the American Revolution accomplish and what did it leave undone? How revolutionary was it? Please contact Prof. Fischer by email for further information (kfischer@umn.edu).
Style: 45% Lecture, 5% Film/Video, 40% Discussion, 10% Small Group Activities.

Hist 3821 United States in the 20th Century to 1945
3 credit(s); Meets CLE req of Historical Perspectives
Instructor: Lindquist, Malinda A
Description: Student may contact the instructor or department for information.

Hist 3822 United States in the 20th Century Since 1945
3 credit(s);
Instructor: Arnett, Jessica
Description: Student may contact the instructor or department for information.

Hist 3856 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 3872 American Indian History: 1830 to the Present
3 credit(s); Credit will not be granted if credit has been received for: AMIN 3872; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Historical Perspectives
Instructor: O’Brien, Jean María
**Hist 3878 American West**
3 credit(s);
Instructor: Stone, Paul Clois

*Description:* History 3878, "The North American West Since 1845" combines cultural and social approaches to the study of the Trans-Mississippi West since the American annexation of the Republic of Texas. The course explores concepts of Western regionalism and identity in their relationships to nationality, nationalism, and statehood. A major theme of the course is an examination of the processes by which western lands, including Alaska and Hawaii, which were once part of large international empires, became states in the American republic. Reading is relatively heavy but the course also relies on guest lectures, films and field trips and students have a wide degree of flexibility in choosing areas of particular interest in which they wish to work.

*Style:* 60% Lecture, 20% Discussion, field trips, films, music

*Grading:* 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.

*Exam Format:* maps, objectives, multiple choice, essays

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**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 4010V Honors: Research Seminar: Making Minnesota, 1600-1889**
A-F only, 4 credit(s), max credits 16, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Norling, Lisa A

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

**Hist 4010V Honors: Research Seminar: Medieval Mediterranean: Merchants and Pirates**
A-F only, 4 credit(s), max credits 16, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Reyerson, Kathryn L

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

**Hist 4010V Honors: Research Seminar**
A-F only, 4 credit(s), max credits 16, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: McNamara, Patrick J

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

**Hist 4010W Research Seminar: Making Minnesota, 1600-1889**
A-F only, 4 credit(s), max credits 16, 4 completions allowed; Meets CLE req of Writing Intensive
Instructor: Norling, Lisa A

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

**Hist 4010W Research Seminar: The Medieval Mediterranean: Merchants and Pirates**
A-F only, 4 credit(s), max credits 16, 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 4010W Research Seminar
A-F only, 4 credit(s), max credits 16, 4 completions allowed;Meets CLE req of Writing Intensive
Instructor: McNamara, Patrick J
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: 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: Isaacman, Allen F
Description: Student may contact the instructor or department for information.

Hist 5053 Doing Roman History: Sources, Methods, and Trends
3 credit(s);
Instructor: Gallia, Andrew B
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 5540 Topics in Mediterranean Studies: Violence Across the Mediterranean
A-F only, 3 credit(s), max credits 15, 5 completions allowed;
Instructor: LORCIN, PATRICIA M.E.
Description: Student may contact the instructor or department for information.

Hist 5802 Readings in American History, 1848-Present
A-F only, 3 credit(s);Credit will not be granted if credit has been received for: HIST 8802;
Instructor: Lindquist, Malinda A
Description: Student may contact the instructor or department for information.

Hist 5831 Cultural Fallout: The Cold War and Its Legacy: Readings
A-F only, 3 credit(s);
Instructor: May, Elaine Tyler
Description: Student may contact the instructor or department for information.

Hist 5900 Topics in European/Medieval History: Crusades: Islam, Christianity in Mediterranean
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Lower, Michael
Description: In this seminar we will explore the crucial role of the crusades in the development of Muslim-Christian relations and Mediterranean societies. While the crusades are often studied solely as an aspect of European history, we will attempt instead to open up a broader perspective on a movement that brought peoples from Iceland to Inner Asia together in complex sets of relations that crossed multiple borders of pre-modern belief and belonging. Pursuing this new approach will entail serious engagement with non-European perspectives and with fields of inquiry -- such as Mediterranean and Near Eastern Studies -- that traditionally have stood outside the purview of crusades history. Particular
areas of focus will include: the multi-confessional and multi-ethnic Middle East in the age of the crusades; the development of ideologies of religious difference in the Muslim, Christian, and Jewish traditions, with special reference to holy war; and the legacy of the crusades in modern inter-religious relations, from the nineteenth-century European colonial period to the present. Class meetings will alternate between group discussions of common readings and in-class presentations of individually assigned readings.

**Style:** 10% Lecture, 50% Discussion, 40% Student Presentation.

**Grading:** 50% reports/papers, 30% in-class presentation, 20% class participation.

**Hist 5901 Latin America Proseminar: Colonial**
- A-F only, 3 credit(s);
- **Instructor:** Chambers,Sarah C
- **Description:** Student may contact the instructor or department for information.

**Hist 5910 Topics in U.S. History: New Approaches to African American History**
- 3 credit(s), max credits 16, 5 completions allowed;
- **Instructor:** Mathieu,Saje M
- **Description:** Student may contact the instructor or department for information.

**Hist 5980 Topics in Comparative Women's History: Historical Approaches to Women's Work**
- A-F only, 3 credit(s), max credits 20, 5 completions allowed;
- **Instructor:** Maynes, Mary Jo
- **Description:** Student may contact the instructor or department for information.

**Hist 8015 Scope and Methods of Historical Studies**
- A-F only, 3 credit(s);
- **Instructor:** Mason, Austin Prosser Johnson
- **Description:** Student may contact the instructor or department for information.

**Hist 8540 Topics in Mediterranean Studies: Violence across the Mediterranean**
- A-F only, 3 credit(s), max credits 15, 5 completions allowed;
- **Instructor:** LORCIN, PATRICIA M.E.
- **Description:** Student may contact the instructor or department for information.

**Hist 8802 Readings in American History, 1848-Present**
- A-F only, 3 credit(s); Credit will not be granted if credit has been received for: HIST 5802;
- **Instructor:** Lindquist, Malinda A
- **Description:** Student may contact the instructor or department for information.

**Hist 8900 Topics in European/Medieval History: Crusades: Islam, Christianity in Mediterranean**
- A-F only, 3 credit(s), max credits 16, 5 completions allowed;
- **Instructor:** Lower, Michael
- **Description:** In this seminar we will explore the crucial role of the crusades in the development of Muslim-Christian relations and Mediterranean societies. While the crusades are often studied solely as an aspect of European history, we will attempt instead to open up a broader perspective on a movement that brought peoples from Iceland to Inner Asia together in complex sets of relations that crossed multiple borders of pre-modern belief and belonging. Pursuing this new approach will entail serious engagement with non-European perspectives and with fields of inquiry -- such as Mediterranean and Near Eastern Studies -- that traditionally have stood outside the purview of crusades history. Particular areas of focus will include: the multi-confessional and multi-ethnic Middle East in the age of the crusades; the development of ideologies of religious difference in the Muslim, Christian, and Jewish traditions, with special reference to holy war; and the legacy of the crusades in modern inter-religious relations, from the nineteenth-century European colonial period to the present. Class meetings will alternate between group discussions of common readings and in-class presentations of individually assigned readings.
- **Style:** 10% Lecture, 50% Discussion, 40% Student Presentation.
- **Grading:** 50% reports/papers, 30% in-class presentation, 20% class participation.

**Hist 8910 Topics in U.S. History: New Approaches to African American History**
- A-F only, 3 credit(s), max credits 16, 5 completions allowed;
- **Instructor:** Mathieu, Saje M
- **Description:** Student may contact the instructor or department for information.

**Hist 8930 Topics in Ancient History: Doing Roman History: Sources, Methods, and Trends**
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Gallia, Andrew B
Description: Student may contact the instructor or department for information.

Hist 8950 Topics in Latin American History: Colonial Latin America
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Chambers, Sarah C
Description: Student may contact the instructor or department for information.

Hist 8960 Topics in History: Historical Approaches to Women's Work
A-F only, 3 credit(s), max credits 16, 5 completions allowed;
Instructor: Maynes, Mary Jo
Description: Student may contact the instructor or department for information.

Hist 8960 Topics in History: German-Jewish Transnationalism
A-F only, 1-4 credit(s), max credits 16, 5 completions allowed;
Instructor: Mc Cormick, Rick
Description: Student may contact the instructor or department for information.

History of Medicine 510 Diehl Hall (Box 506 Mayo)

HMed 3001W Health, Disease, and Healing I
4 credit(s); Credit will not be granted if credit has been received for: HMED 3001V; Meets CLE req of Historical Perspectives; meets CLE req of Writing Intensive
Instructor: Shackelford, Jole Richard
Description: History of Medicine 3001W is a writing intensive survey of the history of Western biomedical ideas, research, and health care practices from the ancient Mediterranean and Middle Eastern foundations to the clinical movement of the early nineteenth century. These ideas and practices have left their marks on modern medicine and help explain the origins and appeal of today's alternative medicines as well. Many of our attitudes about the proper relationship between patient and practitioner, for example, are founded on the ideas set down by Hippocrates and Galen in ancient Greece and Rome. Today's herbal medicine is also in large measure shaped by the experiences and discoveries of early European and Middle Eastern healers. Similarly, one can find the origins of modern pseudo-scientific and quack medicines in early modern theories about how to regulate the kinds of and amounts of stimulation that people receive from their environments, which were believed to affect the healthy flow of fluids and spirits throughout the body.
Style: 75% Lecture, 25% Discussion.
Grading: 15% mid exam, 25% final exam, 45% reports/papers, 15% class participation.
Exam Format: In-class, prose (essay-style) examinations.

HMed 3075 Technology and Medicine in Modern America
3-5 credit(s), max credits 5, 1 completion allowed; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Tobbell, Dominique Avril
Description: Student may contact the instructor or department for information.

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: HMed 4960 is a seminar intended for students who wish to write their senior papers on a topic in the history of medicine or public health. We will begin the semester by discussing and practicing critical reading and how to develop research questions of appropriate scope for a semester project. Throughout the semester we will work on evaluating sources, using both primary and secondary material. Students will be introduced to several of the archival collections available at the University of Minnesota Libraries as well as online. This class is intended to meet the needs of students working on their final projects for the Biology, Society and Environment major, UROP, honors theses, and other disciplines.

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 8220 Seminar: Current Topics in the History of Medicine
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Tobbell, Dominique Avril
Description: Student may contact the instructor or department for information.

HMed 8631 Directed Study
A-F only, 1-6 credit(s), max credits 12;
Instructor: Gunn, Jennifer
Description: Student may contact the instructor or department for information.

History of Science and Technology 381 Physics

HSci 1714 Technology and Civilization: Stone Tools to Steam Engines
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 3714; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: 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.

HSci 1814 Revolutions in Science: The Babylonians to Newton
HSci 3244 History of Ecology and Environmentalism

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.

HSci 3211 Biology and Culture in the 19th and 20th Centuries

Description: In this course, we will answer these questions by exploring case studies through lectures, films, group discussion, reading, short formal writing assignments, and collaborative projects and presentations. We will look at the impact of fields like genetics and eugenics, large-scale engineering, and nuclear physics on American society from the early twentieth century up to the present. But we will also debate the ethical issues embedded in these fields and think deeply about how the political attitudes and cultural norms of a nation can shape the development of science and technology. There will be three class meetings per week: two meetings of the entire class for lectures, films, and presentations and one smaller group discussion at the end of the week. This honors course meets CLE requirements for the historical perspectives core, the citizenship and public ethics theme, and is a writing intensive course.

Instructor: Bozenta, Victor Dan

HSci 3214 History of Ecology and Environmentalism

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.

Grading: 20% mid exam, 40% final exam, 30% reports/papers, 10% attendance.

Instructor: Jones, Susan D.

HSci 3333V Honors Course: Issues in American Science and Technology in the Past Century

Description: Science and technology are everywhere in our world today. from the smartphone in your own hand to the forensic science on episodes of CSI to debates over North Korea's pursuit of nuclear technology. But have you ever wondered how science and technology became such profound and ubiquitous forces in American industry, government policy, popular culture, and everyday life? What are the moral responsibilities of scientists and engineers in a society where their work plays such a crucial role? In this course, we will answer these questions by exploring case studies through lectures, films, group discussion, reading, short formal writing assignments, and collaborative projects and presentations. We will look at the impact of fields like genetics and eugenics, large-scale engineering, and nuclear physics on American society from the early twentieth century up to the present. But we will also debate the ethical issues embedded in these fields and think deeply about how the political attitudes and cultural norms of a nation can shape the development of science and technology. There will be three class meetings per week: two meetings of the entire class for lectures, films, and presentations and one smaller group discussion at the end of the week. This honors course meets CLE requirements for the historical perspectives core, the citizenship and public ethics theme, and is a writing intensive course.

Instructor: Long, Tulley A
HSci 3401 Ethics in Science and Technology
3 credit(s); Credit will not be granted if credit has been received for: HSCI 5401; Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Buchanan, Nicholas Seong Chul
Description: Science and technology are no longer confined to the rarefied worlds of universities, laboratories, or the research and development departments of high-tech companies. Instead, science and technology pervade our everyday lives in both highly visible and less easily seen ways. In the process, the ethical issues associated with science and technology have come to affect nearly every corner of daily existence. From questions of privacy and the internet, to bioengineering and risk, science and technology in the law, and environmental and technological disasters, the ethics of science and technology may very well have become the ethics of everyday life. By studying historical and contemporary ethical issues in science and technology, we will attempt to uncover how the ethics of science and technology have changed over time, to appreciate the diversity of ethical positions regarding science and technology, and to learn how to better support our own ethical positions. We will also explore how science and technology are products of human choices? but at the same time, how science and technology enable and constrain the choices we can make.

HSci 3714 Technology and Civilization: Stone Tools to Steam Engines
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1714; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
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, 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
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1715; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Thomas, Mary Margaret
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
3-4 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: HSCI 1814; Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
HSci 4321 History of Computing
3 credit(s); Credit will not be granted if credit has been received for: CSCI 4921; Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: Misa, Thomas J
Description: Course examines the question "how do technologies change the world?" through the history of computing. Readings, discussions, and lectures on the people, technologies, ideas, and institutions of modern computing; and the uses of computers in computation, control, simulation, communication, and recreation. Developments in last 150 years: evolution of hardware and software; growth of computer and semiconductor industries and their relations to other businesses; changing relationships resulting from new data-gathering and analysis techniques; automation; social and ethical issues.

HSci 5211 Biology and Culture in the 19th and 20th Centuries
3 credit(s); Credit will not be granted if credit has been received for: HSCI 3211; 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 will look at the development of genetics and its relation to evolutionary theory; and attempt to understand the complicated relationship between genetics and eugenics. Finally, we will 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: Science and technology are no longer confined to the rarefied worlds of universities, laboratories, or the research and development departments of high-tech companies. Instead, science and technology pervade our everyday lives in both highly visible and less easily seen ways. In the process, the ethical issues associated with science and technology have come to affect nearly every corner of daily existence. From questions of privacy and the internet, to...
bioengineering and risk, science and technology in the law, and environmental and technological disasters, the ethics of science and technology may very well have become the ethics of everyday life. By studying historical and contemporary ethical issues in science and technology, we will attempt to uncover how the ethics of science and technology have changed over time, to appreciate the diversity of ethical positions regarding science and technology, and to learn how to better support our own ethical positions. We will also explore how science and technology are products of human choices? but at the same time, how science and technology enable and constrain the choices we can make.

HSci 5993 Directed Studies
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Jones, Susan D.
Description: Student may contact the instructor or department for information.

HSci 5993 Directed Studies
1-15 credit(s), max credits 15, 1 completion allowed;
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 8421 Social and Cultural Studies of Science
3 credit(s);
Instructor: Alexander, Jennifer Karns
Description: SEMINAR IN THEORIES OF TECHNOLOGICAL CHANGE. This seminar examines prominent theories of technological change, against the backdrop of three historical, empirical examples: the printing revolution and the contemporary revolution in electronic communications; industrial revolutions and the current challenge of industrial globalization; and technology's role in historical/ongoing debates about the meaning and value of human work. Topics include technological determinism, social construction of technology, actor-network theory, and activity theory; communications, orality, literacy, and electracy; semiotics and post-modernity; work, economics, and self; and democracy and the user's critique of technology. Graduate students from any field are welcome. There is no prerequisite.
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.

HSci 8930 Seminar: History of Technology
3 credit(s), max credits 6;
Instructor: Misa, Thomas J
Description: Student may contact the instructor or department for information.

HSci 8993 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: Jones, Susan D.
Description: Student may contact the instructor or department for information.

HSci 8993 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: Misa, Thomas J
Description: Student may contact the instructor or department for information.

HSci 8993 Directed Studies
1-5 credit(s), max credits 15, 15 completions allowed;
Instructor: Boantza, Victor Dan
Description: Student may contact the instructor or department for information.

Hmong 220 Folwell Hall

Hmng 1011 Beginning Hmong I
5 credit(s); Credit will not be granted if credit has been received for: HMNG 4001;
**Instructor:** Vang,Bee  
**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 I**  
5 credit(s); Credit will not be granted if credit has been received for: HMNG 4001;  
**Instructor:** LeYang,Maxwell  
**Description:** Beginning Hmong 1011 is a course that teaches Hmong to true beginners (native speakers and non-native speakers). Students who have inherited the basics of the written language are advised to take the Accelerated Hmong course offers on Monday and Wednesday. The contents of Beginning Hmong 1011 include an exposure to the primary level of the written language, basic everyday conversation, and elementary vocabularies. The course will familiarize students with Hmong alphabets (tone markers, singular and plural vowels and consonants), pronunciation, sentence structure, and the parts of speech. Class activities will be designed surrounding health, education, and consumer themes. A minimum exploration of Hmong culture will be emphasized. Upon completion of this course, students are expected to be able to converse in simple Hmong dialogues and compose simple paragraphs. Required Texts The text for the course is Phau Xyaum Nyeem Ntawv Hmong Dawb. There will also be supplemental materials provided by the instructor. You can find the Text at Paradigm.  
**Style:** 50% Lecture, 25% Discussion. class and project activities  
**Grading:** 30% final exam, 30% quizzes, 10% in-class presentation, 10% class participation, 10% problem solving, 10% other evaluation. Project  
**Exam Format:** multiple choice, short answers, true/false

**Hmng 1015 Accelerated Beginning Hmong**  
5 credit(s); Ability in basic spoken Hmong  
**Credit will not be granted if credit has been received for:** HMNG 4005;  
**Instructor:** Vang,Bee  
**Description:** Student may contact the instructor or department for information.

**Hmng 3021 Intermediate Hmong I**  
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 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 I**  
3 credit(s); Grad student  
**Credit will not be granted if credit has been received for:** HMNG 1011;  
**Instructor:** Vang,Bee  
**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
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 4001 Beginning Hmong I
3 credit(s); Grad studentCredit 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

Grading: 20% mid exam, 20% final exam, 15% written homework, 15% attendance, 15% in-class presentation.

Hmng 4003 Intermediate Hmong I
3 credit(s);4002, grad studentCredit will not be granted if credit has been received for: HMNG 3021;
Instructor: LeYang, Maxwell
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.
Honors Seminar 20 Nicholson Hall

HSem 2005H Honors Seminar: Economic Opportunity & Inequality in the U.S.
A-F only, 3 credit(s); max credits 3, 1 completion allowed; Meets CLE req of Diversity and Soc Justice US
Instructor: Pierce, Jennifer L
Description: The idea that America is the "land of opportunity" and that the US version of free markets, individual liberty, and democratic governance is the best way to organize a society are deeply ingrained within American culture. The American dream of unlimited opportunity and success is not only something American citizens imagine, but also one many recent immigrants share with them. Hollywood films, television, and now social media have brought the dream to many nations across the globe. After exploring the multiple histories and meanings of the American dream, this course focuses on its reality in the contemporary US among different social groups?including white middle class and working class Americans, people of color, immigrants, and the superrich. The recent recession, combined with stagnant or falling wages for millions of Americans over the past 30+ years, as well as the greatest economic inequality in over a century, have raised questions about whether or not American society continues to provide economic opportunity from hard work, education, and honesty. Surveys show that Americans are worried about jobs, income, retirement, housing, and the prospects for future generations. This course examines the trends in American society that have led to growing economic and social concerns about economic opportunity and security. Jennifer Pierce is a sociologist and professor of American Studies. Her research areas are feminist theory, gender, affirmative action, workplace and labor studies, and race relations, among others. Her most recent book is Racing for Innocence: Whiteness, Gender, and the Backlash Against Affirmative Action.

HSem 2009H Honors Seminar: Contemporary Art and Politics: Duchamp to Weiwei
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Tang, Meng
Description: Art has a social role to serve, and the artist has a moral obligation to society. It can engage the social issues and environment of its day, either directly or indirectly. This course will discuss the subject matter and practices of major artists?Marcel Duchamp, Joseph Beuys, Christo and Jeanne-Claude, Jeff Koons, Andy Warhol, Yoko Ono, Ilya Kabakov, Jean-Michel Basquiat, Ai Weiwei, etc.?whose creative work frequently intertwines with commentaries on contemporary politics. As a strategy of being, these contemporary artists seem to use art to engage their audiences in a dynamic dialogue concerning certain aspects of contemporary life. These and other artists want to interpret political reality in order to change it; that is, to bring about social and political transformation through aesthetic means. This course will provide an overview of the ideas, strategies, and work of the artists as a critical lens for viewing the changing cultural and political landscape of an increasingly technological and globalized world. This course will take a comparative studies approach to the development of contemporary art in its historical, social, and political contexts, the increasing influence of the Western art in China, and the cross-cultural communication customs and protocols of international art practice and criticism. Meng Tang is an internationally recognized video and installation artist and a lecturer in the Department of Art, where she teaches digital filmmaking, introduction to art, and art and politics courses. Her life has provided her with almost daily experiences in dealing with the cultural differences that inspire much of her work. She works in many different media?including film, video...
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 fabrication and characterization methods). Our overall target is to set up a gross "topography of music," namely a big body encompassing all aspects and putting them together in a non-conflicting way. Guerino Mazzola is a professor of Creativity, Improvisation, and Mathematical Music Theory in the School of Music. His approach to music includes his role as an internationally acclaimed free jazz pianist and composer. He has also profiled the European school of mathematical music theory and music software since 1980. He has written 20 books, among them The Topos of Music, proposed by the American Mathematical Society as the mathematics book of the year in 2005. His understanding of music mirrors the whole life from thought to action, from logic to emotion, from symbols to gestures, from the spirits to bodies, from creativity to software.

The course is designed for non-science majors, but a background in high school chemistry is required. Students will use the primary literature to research safety studies, and to learn how the body metabolizes foods and drugs. The course will introduce students to the processes of food and drug testing, basic statistical analysis, and elementary biochemistry. The seminar will address questions such as: Who can you trust? Is a 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.

Tropical forests are the global warehouses of biodiversity nowhere else on Earth do we see such a variety of different kinds of plant and animal species. In addition, these ecosystems store a significant amount of carbon in biomass and soils, but land-use changes such as deforestation release this carbon to the atmosphere and contribute to global warming. What are the local and global threats to tropical forests? Why isn’t the conservation of tropical forests a no-brainer? Is a tropical extinction crisis inevitable? In this class we will address these questions by exploring three topics in detail: the origins and patterns of tropical biodiversity, policy mechanisms like REDD (Reduced Emissions from Deforestation and Degradation) that are intended to preserve tropical forests, and barriers to conservation. Classes will blend lectures, discussions of readings, and student participation, and will draw heavily on Dr. Powers's 19 years of experience working in tropical forests. Dr. Jennifer Powers is an associate professor in the departments of Geography, Evolution, and Behavior and Plant Biology at the University of Minnesota. She is broadly trained in ecosystems ecology, biogeochemistry, and plant ecology, and has worked in tropical forests in Central and South America for over 19 years. The long-term goal of her research program is to understand how biophysical factors and human activities shape biodiversity and ecosystem functioning of tropical forests. Her current projects include a long-term study of how changes in land use such as deforestation and forest regeneration affect the balance of carbon on the land and in the atmosphere in Costa Rica, and a study of the effects of woody vines on ecosystem processes and community dynamics in Panama.
opened the floodgates—both for the amount of data being collected and analyzed and the ease of access to this data for most of our time learning about and from contemporary crowdsourcing systems and web sites, as the Internet has really absurd that crowdsourcing can work. This class will teach you about crowdsourcing. Crowdsourcing predates the computer age, and you will learn about “citizen science” examples from the 19th and early 20th Century. However, we will spend

HSem 2515H Honors Seminar: Experiencing Local Environmental Solutions
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Capel, Paul David
Description: How are environmental problems actually addressed? How do we protect groundwater and surface water from contamination? How do we dispose of solid and hazardous waste? How do we monitor air quality? How do we track changes on the landscape to protect the environment? How is research conducted to create solutions for the future? This seminar will address some of the solutions to the environmental problems that affect our society by examining the science and by experiencing the solutions that are used on the University of Minnesota campus. Each week, we will visit the places on campus designed as environmental solutions, hear from the experts, and discuss the engineering and human aspects of these solutions. The class will involve weekly reading and writing assignments. There will also be a semester-long, hands-on project to devise a realistic, potential solution to an environmental issue. Paul Capel is an adjunct associate professor in the department of Civil Engineering and a research scientist with the US Geological Survey. His research interests focus on the behavior and fate of chemicals after they are released in the environment. He has taught freshman seminars and courses on environmental engineering and environmental chemistry.

HSem 2519H Honors Seminar: Crowdsourcing: Putting the ‘U’ in Citizen Science
A-F only, 3 credit(s);
Instructor: Terveen, Loren Gilbert
Description: Wikipedia. Linux. GalaxyZoo. Fold-It. These well known web sites and software systems exemplify an approach to the production of knowledge that has become common over the past decade: crowdsourcing. The idea is simple: take jobs that had been done by professionals working for an organization and "outsource" them to... anyone. Anyone can contribute to the largest encyclopedia ever written. Anyone can write features for software that drives much of the World Wide Web. Anyone can categorize images that lead to fundamental astronomical discoveries or find ways for proteins to fold. While you may take the success of these systems for granted, you shouldn’t. Instead, it should seem absurd that crowdsourcing can work. This class will teach you about crowdsourcing. Crowdsourcing predates the computer age, and you will learn about “citizen science” examples from the 19th and early 20th Century. However, we will spend most of our time learning about and from contemporary crowdsourcing systems and web sites, as the Internet has really opened the floodgates?both for the amount of data being collected and analyzed and the ease of access to this data for online volunteers wishing to participate. You will learn about the technologies that make this approach workable at a massive scale, the social processes that have formed around these technologies, and current challenges, problems, and research approaches to solve the problems. Loren Terveen is a professor of Computer Science. His research interests include a variety of topics in human?computer interaction and social computing. He helped develop one of the early recommender web sites (PHOAKS) and more recently has developed a geographic crowdsourcing system (Cyclopath), a mobile crowdsourcing system (FolkSource), and has led many projects analyzing data from popular sites such as Wikipedia and Pinterest. Lucy Fortson is an associate professor in the School of Physics and Astronomy. Her research interests are in experimental high-energy astrophysics. As a member of the Zooniverse collaboration, she also does extensive work on citizen science projects where laypeople sort through and categorize millions of images and other digital objects generated by telescopes, satellites, ocean sensors, and digitized texts. She works particularly with Galaxy Zoo, where over 250K members of the general public have classified over a million galaxies.

HSem 2519H Honors Seminar: Crowdsourcing: Putting the ‘U’ in Citizen Science
A-F only, 3 credit(s);
Instructor: Fortson, Lucy Fear
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online volunteers wishing to participate. You will learn about the technologies that make this approach workable at a massive scale, the social processes that have formed around these technologies, and current challenges, problems, and research approaches to solve the problems. Loren Terveen is a professor of Computer Science. His research interests include a variety of topics in human-computer interaction and social computing. He helped develop one of the early recommender web sites (PHOAKS) and more recently has developed a geographic crowdsourcing system (Cyclopath), a mobile crowdsourcing system (FolkSource), and has led many projects analyzing data from popular sites such as Wikipedia and Pinterest. Lucy Fortson is an associate professor in the School of Physics and Astronomy. Her research interests are in experimental high-energy astrophysics. As a member of the Zooniverse collaboration, she also does extensive work on citizen science projects where laypeople sort through and categorize millions of images and other digital objects generated by telescopes, satellites, ocean sensors, and digitized texts. She works particularly with Galaxy Zoo, where over 250K members of the general public have classified over a million galaxies.

HSem 2529H Honors Seminar: "Elementary Dr. Einstein:" How Scientists Reason
A-F only, 3 credit(s);
Instructor: Janssen, Michel
Description: How do scientists figure things out? How can they be confident they got it right? In this seminar we will examine such questions in the context of several concrete episodes from the history of science (associated with the names of such luminaries as Copernicus, Kepler, Newton, Darwin, and Einstein). Specifically, we will reconstruct the reasoning employed by the scientists involved in terms of two approaches to understanding scientific inference that are popular among philosophers of science, known as Inference to the Best Explanation (IBE) and Bayesianism, respectively. We will compare our reconstructions of the reasoning of the scientists we study with what they themselves had to say about proper scientific methodology. Michel Janssen is a professor of History of Science. He worked as an editor for the Einstein Papers Project before coming to the University of Minnesota in 2000. As a historian of physics he's embedded in the School of Physics and Astronomy, and his research focuses on the history of relativity and quantum theory.

HSem 2539H Honors Seminar: The Future
A-F only, 3 credit(s);
Instructor: Buchanan, Nicholas Seong Chul
Description: What will the future bring? Will the years, decades, or even centuries to come bring prosperity or despair? A technological utopia or an apocalypse? Unbounded freedom or enslavement? For numerous writers, filmmakers, and thinkers, questions about the future of humanity have inspired works of speculation that touch on every imaginable aspect of the human condition. In this course, we will use the exploration of the future in science fiction novels and films as a way to understand the past?especially the culture, concerns, and preoccupations of the places and times where these futures were imagined. We will also consider how our interpretations of these futures shed light on present day issues. In particular, we will examine how these sources can illuminate changing enthusiasms and trepidations about the cultural meaning of science and technology, the human impact on the environment, the relationships between the powerful and the powerless, and ideas of freedom and human autonomy. Star ships, intelligent machines, and aliens will also be discussed. Nick Buchanan is visiting assistant professor in the Program in History of Science and Technology. He was the Robert O. Hettlege fellow in socio-legal studies at the American Bar Foundation in Chicago, where he focused on the study of scientific expertise in legal decision-making. His interests center on the historical relationships between science, technology, and the environment, and questions concerning the political uses of scientific authority.

HSem 2624H Honors Seminar: Avoiding Apocalypse: Humans, Environment, Future
A-F only, 3 credit(s), max credits 6;Meets CLE req of Environment
Instructor: Draeger, Kathryn Joanne
Description: This class will provide students with a broad exposure to the various first principles relevant to the concept of sustainability. In the spirit of liberal arts, the series of readings and lectures will cover primary literature in systems ecology, energy and natural resources, thermodynamics, history, anthropology, human behavior, neuroscience, environmental science, sociology, economics, globalization/trade, and finance/debt with an overarching goal to give students an understanding of how the human ecosystem really functions, along with opportunities and constraints relevant for our future. Examples of Minnesota's experimentation in community-level sustainability and localization through the University's Regional Sustainable Development Partnerships will be provided. The class will be equal parts lecture and group discussion. Students will be expected to actively participate in thought experiments and weekly discussions. Though the hard science relating to sustainability will be surveyed, few answers will be presented and it is hoped that creativity and group dialogue will lead to emergent ideas on how these big themes fit together. Dr. Kathryn Draeger is the statewide director of the University of Minnesota's Regional Sustainable Development Partnerships. As such, Kathy oversees staff and five regional boards composed of community members and University faculty. The Regional Partnerships build community?University partnerships in the areas of local foods and sustainable agriculture, clean energy (through the Clean Energy Resource Teams), natural resources, and sustainable tourism and resilient communities. Dr. Draeger is also an adjunct professor of Agronomy and Plant Genetics. She serves on the Minnesota Pollution Control Agency board as the state's agricultural representative and lives and farms sustainably in Big Stone County Minnesota. Dr. Nate Hagens worked on Wall Street at Lehman Brothers and Salomon Brothers and closed his own hedge fund in 2003 to pursue interdisciplinary knowledge about the bigger picture of modern society. Nate is the US Director for Institute for Integrated Economic Research (IIER) and is on the Board of Post Carbon Institute and Institute for Energy and Our Future.
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HSem 2710H Honors Seminar: A Pill for Every Problem or Problem Pills?
A-F only, 3 credit(s), max credits 6; Meets CLE req of Technology and Society
Instructor: Marino, Susan Ellis
Description: Do pills deliver what they promise? Pills that offer relief from anxiety, depression, and numerous other mental dysfunctions are taken by millions of people, including children and the elderly. Are neuroscientists as certain of the causes of mental illness and mental anguish as the medical community and pharmaceutical companies seem to be? What are the societal and ethical implications of this turn toward psychopharmaceutical solutions? By exploring questions such as these, you will acquire a basic understanding of the current neurochemical theories of behavior and emotion and become acquainted with drug research and development, including clinical trial design. You will also be exposed to the economic (private and federal) and humanitarian forces that fuel drug development, the FDA approval process, health care policy debates, and their broad societal impact. Finally, you will gain an appreciation for the relationship between societal and individual concepts of mental illness and wellbeing and how they affect medication use and development. Newer therapeutic interventions, such as deep-brain stimulation, will also be discussed. Susan Marino is is on the faculty of the College of Pharmacy (Department of Experimental and Clinical Pharmacology) and is the director of the Center for Clinical and Cognitive Neuropharmacology. She has done postdoctoral work in neuropharmacology (University of Chicago, Center for Drug Abuse), neuroanatomy (University of Copenhagen), and clinical pharmacology and pharmacokinetics (University of Minnesota).

HSem 2801H Honors Seminar: Think Like a Lawyer: The Art & Adventure of Torts
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics
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. 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. 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 business start-ups. He strongly believes in helping students understand law, the legal process, and law school.

HSem 3027H Honors Seminar: What is a tragedy?
A-F only, 3 credit(s); Meets CLE req of Civic Life and Ethics
Instructor: Cherbuliez, Juliette
Description: Whether fiction or real event, modern condition or historical myth, private drama or public catastrophe, the idea of “tragedy” has always had specific, but shifting cultural meaning. This class will ask us to consider what “tragedy” means? both through the dramatic genre in which political regimes are overturned and a good number of people usually die...
HSem 3701H Honors Seminar: Exercise Is Medicine: A Central Role in Healthcare  
A-F only, 2 credit(s);  
Instructor: Langland, James  
Description: This seminar will explore in depth the important role that exercise plays in medicine. The benefits of exercise and cardiorespiratory fitness are frequently overlooked and under-emphasized in American health care delivery. Seminar participants will learn of the evidence basis for the use of exercise in a wide variety of conditions including cardiovascular disease, cancer, diabetes, obesity, mental health, and cognition. Related issues such as fitness assessments, nutrition, exercise complications, and sedentary physiology will also be presented. Seminar format will include lectures, discussion, and participant presentations. All seminar participants will be required to research a different aspect of exercise as medicine and present their findings at the seminar. Jim Langland M.D. practices general internal medicine at the University’s Primary Care Center. He is board certified in Internal Medicine, Sports Medicine, and Geriatric Medicine. He is also a Certified Strength and Conditioning Specialist by the National Strength and Conditioning Association. His academic interest is in the therapeutic and prophylactic use of exercise in health care.

HSem 3067V Honors Seminar: Writing Makes a Difference: Writing & Social Change  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Ross Jr, Donald  
Description: In the first half of the seminar, we will develop some of the key issues using examples from the late 18th through the 19th century. These will include Paine’s Common Sense, the Declaration of Independence, the Constitution, The Federalist Papers, Cummins’ The Lamplighter (an early best-seller), Stowe’s Uncle Tom’s Cabin, and Twain’s Tom Sawyer. In addition to reading the texts, students will track down contemporary reactions: book reviews, advertisements, letters and journals, etc. Doing this will help us figure out why and how these texts were targeted to and affected their contemporary audiences. The second half of the seminar will involve students selecting and reporting on twentieth-century texts. I hope this will produce a wide range of examples, and that students will track down influential texts in their own areas of interest. For example, the student of politics might present Wilson’s 14 Points, King’s “I have a dream” or letter from Birmingham Jail. The biologist might discuss the Watson-Crick paper on DNA. Literary examples might contrast a respectable yet controversial novel like Catcher in the Rye with a sleazy companion like Peyton Place. We will also investigate the ways that media (TV, movies) interact to create and maintain best selling books. Donald Ross is a professor of Writing Studies and English. His main area of interest is American literature, especially in the nineteenth century. His publications include a co-authored book on Thoreau, and articles and chapters on travel writing and the teaching of composition. He has been on the faculty since 1971 and has taught Honors Seminars on this topic four times.

HSem 3201V Honors Seminar: Six Degrees of Interdisciplinary Connection  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Lindt, Gayla Jean  
Description: The intention of this multidisciplinary seminar is to seek convergence in what initially appears as divergence. Each student is charged with unfolding multiple narratives for a designed object by situating the object in contrasting disciplines and/or unconventional modes of inquiry as a means of revealing otherwise hidden meaning embodied in the object. The process of investigation and its outcome (a pamphlet of essays and other representations) is a way to practice seeing through other disciplinary lenses, as well as a means to identify and focus one’s own curiosity and take a position that reveals insight about the object as well as the worldview of the student. The seminar is grounded in six themes: promoting a fourth culture, seeing value in contrasting forms, intentionally seeking connection, understanding design as materialized idea, critical thinking as discerning relevance, and developing a pedagogy of interiority. The research framework questions: How does the designed object reflect or critique its historical time and geographic place? How does the designed object reflect or reveal the worldview of its maker? How does the designed object reflect or reveal my primary field of study? How can subjective experience express meaningful truths? How can quantifiable research express meaningful truths? Gayla Lindt works with graduate students during the final project semester, both as a studio critic and as a self-ascribed project “doula,” i.e., as a person who helps students frame, develop and present their M.Arch final project. She also teaches an undergraduate topics course titled “Developing a Professional Narrative,” which examines how architects use writing as part of their professional practice, and has taught the undergraduate honors thesis seminar, as well as a Bachelor of Design in Architecture workshop that uses imaginative children’s book illustration as a critical lens on architectures. Prior to this, she had the privilege of organizing (with Jane King Hession) the vast drawing collection of renowned modernist architect Ralph Rapson, FAIA; Rapson’s drawings are destined for the University of Minnesota’s Northwest Architectural Archives and Cranbrook Archives in Bloomfield Hills, Michigan. Lindt has also worked at CityDeskStudio, Inc., at the Design Center for American Urban Landscape (now the Metropolitan Design Center), and as a freelance writer, editor and graphic designer.
Horticultural Science
305 Alderman Hall

Hort 1001 Plant Propagation
4 credit(s); Meets CLE req of Biological Sciences
Instructor: Michaels, Thomas E
Description: Plant Propagation immerses you in learning the fundamental biological concepts of plant structure, growth and reproduction, and challenges you to apply these concepts in the greenhouse to hands-on plant propagation. You might have heard from others that Plant Prop is a challenging course with a great lab and that you get to take home the plants that you propagate. What you may not have heard is that in the Fall semester the course is taught with an alternative hybrid format. Before enrolling I would like you to think about whether this format is a good fit for you and the way you learn. The lecture content for this course will be delivered primarily on-line through the use of text, audio, video, and discussions hosted on Moodle. You must have reliable internet access several times each week to access lecture materials and the capacity to listen to downloaded mp3 audio lecture companion podcasts. You must also have weekly access to a rudimentary digital camera (it doesn't have to be fancy, but it does need to be able to take clearly focused closeups), and the ability to upload to Moodle forums. You will use the camera for your weekly homework. The most important thing though is that you really must have the self-discipline to set aside specific times every week to work through the online lecture material just as if you were going to a conventional lecture. The labs are taught in a conventional, face-to-face format on the St. Paul campus in a great greenhouse facility. Yes, you get to keep the plants you propagate. <P> I will hold a face to face class meeting from 5:10pm to 6:30pm every Wednesday evening on the St. Paul campus. The class meeting is an opportunity for me to introduce the topics addressed in that week's on-line lecture and to answer questions students have about the previous week's topics. On three of those Wednesdays during our class meeting time you will have semester exams. The exam dates are October 3, October 31 and November 28. Based on previous years' official final exam schedules I expect the final exam to be held on Wednesday December 19 at 5:10 pm. You must accommodate these exam times in your schedule. <P> Plant Prop is a very interesting and memorable course that will have you looking at the world around you, and especially at the plants in the world around you, in ways and at a level of detail that you have probably never looked before. For at least one semester you will be a serious plant geek who on a weekly basis is more likely than not to enthusiastically tell your friends and family about something new you learned about plants. And even though the lectures are on-line, the course doesn't feel cold and distant. The labs and class meetings provide a means of direct contact and a sense of community among instructors and students.
Style: 30% Laboratory, 10% Demonstration, 60% Web Based. Lectures are delivered on-line via WebVista and Moodle with mp3 lecture companion podcasts
Grading: 37% mid exam, 8% final exam, 25% reports/papers, 10% quizzies, 10% written homework, 10% laboratory evaluation. Reports and Papers are associated with the laboratory projects. These percentages are approximations to assist with your registration planning.
Exam Format: Multiple choice, matching, draw and label diagrams, short answer, brief essay. Final will be comprehensive. These formats are approximations to assist with your registration planning.

Hort 1013 Floral Design
3 credit(s);
Instructor: Anderson, Neil O.
Description: Floral design is a course to educate students in the creation of professional floral designs to enhance the human experience in a variety of occasions. Floral design is a prime example of a horticulture discipline which
Hort 1061 The Sustainable Lawn

Instructor: Watkins, Eric

Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policies, including fee and financial aid information. Millions of acres across the United States are devoted to turfgrass. Home lawns, parks, athletic fields, golf course, and other turf areas play an important role in environmental quality. Homeowners have little knowledge about fertilizer and pesticide use, irrigation, and mowing. Although the impact of an individual homeowner may be small, the effect of millions of acres of home lawns can be significant. This course will focus on sustainable turfgrass management for the home lawn. The content will be presented in a fashion that focuses on environmentally responsible turfgrass management. The course will begin by presenting an overview of basic horticultural principles and then focus on turfgrass-specific topics. Lectures will provide information necessary for laboratory and discussion portions of the course. Students will learn how to identify common turfgrasses and then how to properly manage a home lawn in a sustainable way. The course will be presented entirely online and make extensive use of online discussion forums, wikis, blogs, and interactive Flash modules. Students will discuss important turfgrass science topics such as fertilizer run-off, pesticide use, and genetically-modified turf. This course will also equip students with the knowledge and tools necessary to maintain quality turf areas with reduced inputs, thereby reducing potential risk to the environment.

Style: 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: The 10 Plants that Changed Minnesota: Growing Sol
3 credit(s); Meets CLE req of Environment
Instructor: Meyer, Mary Hockenberry
Description: This seminar will focus on the impact of the 10 plants that have changed the history of the state and had a major impact on the economy, culture, health, food, arts, history, and the environment. The class includes student lead environmental discussions, guest lectures, independent and small group research that will result in written communications and website information especially related to the 10 Plants and their environmental impact in Minnesota. Class time is: Thursday, 6:00-9:00 PM. Some classes will be held at the Minnesota Landscape Arboretum. Students will learn about the Arboretum and its role in public education and the university. Students will also have a chance to walk and get to know the Arboretum. Transportation from the Minneapolis campus to the Arboretum will be provided. The class is being held at the Arboretum to take advantage of the environmental assets at the Arboretum and expand student’s knowledge of off campus resources.
Style: 30% Lecture, 10% Discussion, 20% Small Group Activities, 20% Student Presentation, 10% Field Trips.
Grading: 40% reports/papers, 25% special projects, 5% quizzes, 10% written homework, 10% attendance, 10% class participation.

Hort 2031 Organic Food: How to Grow It, Where to Buy It, Can it Feed the World?
3 credit(s);
Instructor: Rogers, Mary Anne
Description: Student may contact the instructor or department for information.

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 4015 Advanced Woody and Herbaceous Plant Topics: Prairie Plants and Grasses
A-F only, 1 credit(s), max credits 7, 7 completions allowed;
Instructor: Meyer, Mary Hockenberry
Description: This class will meet at the University of Minnesota Landscape Arboretum. Students will learn to identify many important native and non-native ornamental grasses from Poaceae and Cyperaceae families. Special attention will be given to Carex, an under-utilized genus with over 170 species native to MN. In addition to monocots, we will study fall blooming native perennials particularly in the Asteraceae and Lamiaceae families. Students will learn taxonomic terms, plant morphology, and cultural information for approximately 80 plants.
Style: 15% Lecture, 35% Laboratory, 15% Student Presentation, 35% Field Trips. outside each class looking at plants
Grading: 20% special projects, 60% quizzes, 20% in-class presentation. three identification quizzes, 20% each; special project is a media study or learning aid each student will develop and then present this learning aid at the final class meeting
Exam Format: identification of plants and their habitat or landscape characteristics for each of the three quizzes

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.
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 5012 Common Chinese Medicinal Plants: Growing and Processing
3 credit(s);
Instructor: Chen, Changbin
Description: Student may contact the instructor or department for information.

Hort 5071 Ecological Restoration
4 credit(s);
Instructor: Galatowitsch, Susan M
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: Meyer, Mary Hockenberry
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: Erwin, John E
Description: Student may contact the instructor or department for information.

Hort 6011 Plant Propagation
A-F only, 4 credit(s);
Instructor: Michaels, Thomas E
Description: Hort 6011 Plant Propagation is targeted primarily toward students entering or preparing to enter the Master of Professional Studies in Horticulture who wish to earn graduate credits. Students are co-mingled with students in Hort 1001 Plant Propagation and are required to complete the same lecture and laboratory assignments and exams as students in Hort 1001. In addition, students in Hort 6011 will also participate in a discussion section that meets on alternate Tuesdays from 4:30pm to 6pm, location to be announced, in which we review recent and classic scientific literature that pertains to the topics covered in lecture and lab. Discussion leadership will rotate among the students. Some discussion sections will focus on career planning. For additional information about lecture and lab format and content please see the course guide for Hort 1001.

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: Hoover, Emily
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 1461 Introduction to Housing
A-F only, 3 credit(s);
Instructor: Mitchell, Deborah K
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: 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 2463 Housing and Community Development
A-F only, 3 credit(s);
Instructor: Crump, Jeffrey R
Description: This course is an examination of the linkages between housing and community development. The process of residential neighborhood change and the impact of housing on neighborhood conditions will also be explored. The course considers theories of neighborhood change, trends in residential development, and ideas of community building. Private sector, community-based, and governmental efforts at neighborhood revitalization and their effectiveness will be studied. Related issues such as racial discrimination in housing, gentrification and the displacement of low-income residents will be surveyed. This course also incorporates a community-based learning component. Specific course goals include: 1. Develop an understanding of linkages between housing and the broader community. 2. Develop an appreciation of the linkages between housing and quality of life. 3. Develop an awareness of the connections between housing and social justice.
Style: 40% Lecture, 20% Discussion. Community based learning
Grading: 20% final exam, 30% quizzes, 10% class participation, 40% other evaluation. Community based learning
Exam Format: Essay

Hsg 3482 Sustainable Housing: Community, Environment, and Technology
A-F only, 3 credit(s); 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: 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: 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: 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: 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: 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: Crump, Jeffrey R
Description: Student may contact the instructor or department for information.

Hsg 4196 Internship in Housing Studies
S-N only, 1-4 credit(s), max credits 4, 1 completion allowed; Completion of at least one-half of professional sequence, plan submitted/approved in advance by [adviser, internship supervisor], written consent of faculty supervisor, instr consent credit will not be granted if credit already received for: DHA 4196; Credit will not be granted if credit has been received for: ADES 4196;
Instructor: Bruin, Marilyn J
Description: Student may contact the instructor or department for information.

Hsg 4467W Housing and the Social Environment
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Yust, Becky L
Description: Why do households differ in what housing they can afford, where they want to live, the types of housing that appeal to them, and how their needs change over their lives? This course explores these issues from the perspective of the household members within our social system and the constraints that keep them from achieving the housing that they consider appropriate for them. With an emphasis on the special needs, for example, of elderly persons, minorities, large families, female-headed households, and low-income households, the course is intended to challenge students to develop their own ideas about housing and requires research work, data interpretation, and independent thinking. The assignments are flexible enough to permit students to use the strength of their individual backgrounds and interests to advantage in the class. For example, if you have experience in some specific aspect of housing or with a particular type of household, you will be able to focus on those aspects about which you are knowledgeable and explore them in more depth. There are two major projects in the class. One, a paper (about 15 pages), builds from assignments during the semester to analyze the characteristics and needs of a type of household, the constraints they face in finding housing, and options available to satisfy their housing needs. The second major project is a survey of residents who live in a multifamily housing development in the Twin Cities. Using the research techniques of post-occupancy evaluation, students tour the site (transportation provided), do site observations, create a questionnaire for distribution to the residents, analyze the data, and summarize the results. Through these two projects, students are equipped to understand housing needs of households and how programs and policies can work to support their needs.
Style: 70% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation.
Grading: 25% mid exam, 13% final exam, 44% reports/papers, 6% in-class presentation, 12% class participation.
Exam Format: multiple choice

Hsg 5193 Directed Study in Housing Studies
A-F only, 1-4 credit(s), max credits 8;
Instructor: 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: Crump, Jeffrey R  
Description: Student may contact the instructor or department for information.

Hsg 5193 Directed Study in Housing Studies  
A-F only, 1-4 credit(s), max credits 8;  
Instructor: Bruin, Marilyn J  
Description: Student may contact the instructor or department for information.

Hsg 5467 Housing and the Social Environment  
A-F only, 4 credit(s);  
Instructor: Yust, Becky L  
Description: Why do households differ in what housing they can afford, where they want to live, the types of housing that appeal to them, and how their needs change over their lives? This course explores these issues from the perspective of the household members within our social system and the constraints that keep them from achieving the housing that they consider appropriate for them. With an emphasis on the special needs, for example, of elderly persons, minorities, large families, female-headed households, and low-income households, the course is intended to challenge students to develop their own ideas about housing and requires research work, data interpretation, and independent thinking. The assignments are flexible enough to permit students to use the strength of their individual backgrounds and interests to advantage in the class. For example, if you have experience in some specific aspect of housing or with a particular type of household, you will be able to focus on those aspects about which you are knowledgeable and explore them in more depth. There are two major projects in the class. One, a paper (about 15 pages), builds from assignments during the semester to analyze the characteristics and needs of a type of household, the constraints they face in finding housing, and options available to satisfy their housing needs. The second major project is a survey of residents who live in a multifamily housing development in the Twin Cities. Using the research techniques of post-occupancy evaluation, students tour the site (transportation provided), do site observations, create a questionnaire for distribution to the residents, analyze the data, and summarize the results. Through these two projects, students are equipped to understand housing needs of households and how programs and policies can work to support their needs.  
Style: 70% Lecture, 10% Discussion, 10% Small Group Activities, 10% Student Presentation.  
Grading: 25% mid exam, 13% final exam, 44% reports/papers, 6% in-class presentation, 12% class participation.  
Exam Format: multiple choice

Hsg 8192 Readings in Housing Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: Ziebarth PhD, Ann  
Description: Student may contact the instructor or department for information.

Hsg 8192 Readings in Housing Studies  
A-F only, 1-3 credit(s), max credits 8, 8 completions allowed;  
Instructor: 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: 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: 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: Crump, Jeffrey R
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: Blocker, Renaldo
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 6009;
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 6009;  
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 5222 Managing Diversity  
2 credit(s);  
Instructor: Maeker, Akiko  
Description: Student may contact the instructor or department for information.

HRIR 5252 Employment and Labor Law for the HRIR Professional  
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 5442 Employee Performance Management: Strategies, Systems, and Skills  
2 credit(s);  
Instructor: Bourgerie, Larry David  
Description: Student may contact the instructor or department for information.

HRIR 5443 Principles of Effective Coaching  
2 credit(s);  
Instructor: Benraouane, Sid Ahmed  
Description: Student may contact the instructor or department for information.

HRIR 5662 Personnel Economics  
2 credit(s);  
Instructor: Budd, John W.  
Description: Student may contact the instructor or department for information.

HRIR 6001 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 6111 Using Data and Metrics in Human Resources and Industrial Relations
HRIR 6301 Staffing, Training, and Development
A-F only, 4 credit(s);
Instructor: Kammeyer-Mueller, John Daniel
Description: Student may contact the instructor or department for information.

HRIR 6302 Staffing and Selection: Strategic and Operational Concerns
A-F only, 2 credit(s);
Instructor: Tubre, Travis
Description: Student may contact the instructor or department for information.

HRIR 6303 Employee Training: Creating a Learning Organization
A-F only, 2 credit(s);
Instructor: Tubre, Travis
Description: Student may contact the instructor or department for information.

HRIR 6401 Organizational Theory Foundations of High-Impact HRIR
A-F only, 2 credit(s);
Instructor: Ben-Ner, Avner
Description: Student may contact the instructor or department for information.

HRIR 6441 Organizational Behavior Foundations of High-Impact HRIR
A-F only, 2 credit(s);
Instructor: Hydrie, Yelena
Description: Student may contact the instructor or department for information.

HRIR 6465 Leadership and Personal Development
A-F only, 2 credit(s);
Instructor: Glomb PhD, Theresa M
Description: Student may contact the instructor or department for information.

HRIR 6484 Management of Teams
A-F only, 2 credit(s); HRIR MA student or dept consent Credit will not be granted if credit has been received for: MGMT 6084;
Instructor: Benraouane, Sid Ahmed
Description: Student may contact the instructor or department for information.

HRIR 6701 Labor Relations and Collective Bargaining
A-F only, 4 credit(s);
Instructor: Sojourner, Aaron
Description: Student may contact the instructor or department for information.

HRIR 6801 HRIR in Practice: Strategy, Execution, and Ethics
A-F only, 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 8802 Core Seminar: Organizational Behavior
4 credit(s);
Instructor: Duffy, Michelle Kathleen
Description: Student may contact the instructor or department for information.
HRIR 8825 Research Practicum/Workshop
A-F only, 3 credit(s);max credits 6;Meets CLE req of Arts/Humanities
Instructor: Duffy,Michelle Kathleen
Description: Student may contact the instructor or department for information.

Humanities 831 Heller Hall

Hum 1431 Introduction to Philosophy
A-F only, 3 credit(s), max credits 6;Meets CLE req of Arts/Humanities
Instructor: Kostko,Aaron Thomas
Description: Student may contact the instructor or department for information.

Hum 1433 Introduction to Literature
A-F only, 3 credit(s), max credits 6;Meets CLE req of Literature
Instructor: Nichols,Marcia Dawn
Description: American Identities What does it mean to be an American? How has ?American? been defined historically? How do people from different socioeconomic backgrounds experience ?Americaness? 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 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 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 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  
Instructor: Kostko, Aaron Thomas  
Description: Student may contact the instructor or department for information.

Hum 3481 Technology and Society  
A-F only, 3 credit(s); Meets CLE req of Technology and Society  
Instructor: Nichols, Marcia Dawn  
Description: Student may contact the instructor or department for information.

Industrial Engineering  125 Mechanical 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 3011 Optimization I  
A-F only, 4 credit(s)  
Instructor: Negoescu, Diana  
Description: Student may contact the instructor or department for information.

IE 3521 Statistics, Quality, and Reliability  
4 credit(s)  
Instructor: Carlsson, John Gunnar  
Description: Student may contact the instructor or department for information.

IE 3521 Statistics, Quality, and Reliability  
4 credit(s)  
Instructor: He, Qie  
Description: Student may contact the instructor or department for information.

IE 4511 Human Factors  
A-F only, 4 credit(s); ISyE senior Credit will not be granted if credit has been received for: IE 5511;  
Instructor: Blocker, Renaldo  
Description: Student may contact the instructor or department for information.

IE 4541W Project Management  
A-F only, 4 credit(s); ISyE senior Credit will not be granted if credit has been received for: IE 5541; Meets CLE req of Writing Intensive  
Instructor: Miller, Lisa A  
Description: This course is designed to provide a foundation in project management as currently practiced in industry. Upon successful completion, students will be able to confidently: 1. Recognize the importance of Project Management 2. Structure a project for success by developing (using MS Project software, as appropriate) * Project initiation documents * Work breakdown structures (WBS) * Estimates, resource schedules, and budgets * Schedules (critical path analysis, PERT, Monte Carlo, agile) 3. Manage, control, and closedown a project using earned value analysis, and project reviews. 4. Recognize major components of project risk, and formulate risk mitigation plans 5. Describe Project Manager knowledge, skills & characteristics and self-assess 6. Within the context of an organization’s culture, examine and assess alternative methods of: * Organizing project teams and project offices * Screening, selecting and approving projects 7.
Discuss and evaluate emerging Project Management theories and tools. Use best practices in applying MS Project software to the science of project management.

**Style:** 75% Lecture, 15% Discussion, 10% Student Presentation.

**Grading:** 20% mid exam, 20% final exam, 35% special projects, 20% written homework, 5% class participation.

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**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:** Blocker, Renaldo
- **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 4541W;**
- **Instructor:** Wong, Mimi
- **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: Stochastic Inventory Theory and Supply Chain Mgmt
4 credit(s), max credits 8;
Instructor: Benjaafar, Saif
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.

Information Networking 20 Ruttan Hall

INet 1001 Survey of Information Technology
A-F only, 1 credit(s);
Instructor: Griep, Valarie
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 the student to the major classifications of the information technology landscape, and explores current business needs that technology can satisfy. Our key focus will be the business use of technology, referred to as Information Technology (IT). Through the lens of data, systems, and networks, we will examine many facets of IT, including degrees, certifications, trends, and career opportunities. We will emphasize the necessity for lifelong learning due to advances in technology and new ways to apply it to an ever changing business milieu. <p class="video"> <iframe width="560" height="315" src="https://www.youtube-nocookie.com/embed/nZjFjw_stsE" frameborder="0" allowfullscreen> </iframe> </p>
Course Syllabus<a href="https://docs.google.com/document/d/1xr-JSrsWIEaWnaMgwaDmgNzJGXC6p-7z39gzX2RsuhQ/edit">Meet Your Instructor<a/></p>
Style: Online

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,
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: Tymeson, Nathan Paul
Description: Student may contact the instructor or department for information.

INet 3350 Special Topics in IT Infrastructure: Ruby, Rails, and Web Development
A-F only, 3 credit(s), max credits 6;
Instructor: Norman, John G
Description: This course opens with rapid coverage of the fundamentals of programming in the Ruby language and then moves on for the rest of the term to the Rails software framework, which provides for rapid development of applications for the web. The course will also touch on related topics such as automated testing and deployment, the Sinatra micro-framework, and the creation and use of web APIs. Prerequisite: Programming experience or completed course work in Java or a similar programming language, e.g. C++; or INET 3101. Very strongly recommended: Some understanding of front-end web development (for instance, knowing basic HTML) and/or some understanding of relational databases and SQL. To self-determine whether you're a candidate for successful completion of this course, take this brief quiz: http://umnquiz.herokuapp.com. If you have any further questions, you may e-mail the instructor, John Norman, at jgnorman@umn.edu

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.

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: This course examines emerging networking concepts, technologies, and applications. The course is taught in separate modules, each on a different topic, and topics change to reflect current trends and expertise of the faculty.
Possible topics include high speed networking, ATM, network security, wireless networks, multimedia, or electronic commerce. Each technology is considered from many points of view: the underlying theory, the driving technological and business needs, the applications, the competing alternative technologies, and the design, implementation, and configuration of such systems. Case studies may be used to identify and analyze strategic issues and problems; concepts and tools from this and previous ITI courses are applied to solve these problems and design realistic programs of action. Students also see how these technologies are implemented in practice through industry speakers, tours, and demonstrations. Hands on labs are included, when possible. The course is targeted to graduate students and senior undergraduate students.

**INet 4153 Policy and Regulation: Effects on Global IT Infrastructure**
A-F only, 3 credit(s);
Instructor: Raabe, John J
**Description:** The intent of this course is to identify the significant domestic and international regulatory demands faced by business and industry IT management. Those regulations’ effects on IT Infrastructure policy, technology management, and decision making will be explored. Several major U.S. and international regulatory works will be examined. IT governance, risk and compliance management frameworks, best practices, and common approaches used to meet today’s regulatory challenges and support common business functions will be reviewed. IT policies, procedures, and processes in highly regulated business sectors will be examined.

**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**
A-F only, 1-3 credit(s), max credits 6;
Instructor: Follstad, Carl
**Description:** Student may contact the instructor or department for information.

**INet 4596 Internship**
A-F only, 1-3 credit(s), max credits 6;
Instructor: Raabe, John J
**Description:** Student may contact the instructor or department for information.

**INet 4596 Internship**
A-F only, 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.

**INet 4709 Art and Practice of Database Administration**
A-F only, 3 credit(s);
Instructor: Onkka, Daniel Charles
**Description:** Database technologies (like Big Data and social media) are at the epicenter of change within IT. Learn database administration (DBA) concepts and techniques, including product and vendor selection, installation requirements (hardware and software), internal database components (memory structures, processing rules), backup and recovery (application VS database), disaster recovery planning, data management (partitioning, indexing strategies), high availability (clustering, mirroring, replication), and capacity planning. To illustrate concepts and technologies, associated material for Oracle 12i, SQL Server 2012, and diverse NoSQL database products are covered. Lab exercises, explained using videos and completed during class, provide hands-on experience solving real-world problems. The course helps prepare for employment as a DBA, a team member who works very closely with other members of an organization: application teams on things like performance tuning; hardware and OS systems support staff on backup and recovery strategies; and senior management for auditing, disaster recovery, and policy development.
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 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: Sen, Soumya  
Description: Student may contact the instructor or department for information.

IDSc 3103 Data Modeling and Databases  
A-F only, 2 credit(s);  
Instructor: Umyarov, Akhmed  
Description: Student may contact the instructor or department for information.

IDSc 3104 Enterprise Systems  
A-F only, 2 credit(s);  
Instructor: Fiedler, Corrine (Corrie)  
Description: Student may contact the instructor or department for information.

IDSc 3202 Analysis and Modeling for Business Systems Development  
A-F only, 4 credit(s);  
Instructor: Reily, Ken  
Description: Student may contact the instructor or department for information.

IDSc 4204W Information Services Management  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Fiedler, Corrine (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: Mojumder, Probal
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: Howey, Rich
Description: Student may contact the instructor or department for information.

**IDSc 6455 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 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.

**IDSc 6511 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.

Innovation Studies 20 Ruttan Hall

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
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Thayer,Tryggvi Brian
Description: Student may contact the instructor or department for information.

IS 5100 Innovation Studies Seminar
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Crosby,Barbara C
Description: Student may contact the instructor or department for information.

IS 5100 Innovation Studies Seminar
A-F only, 3 credit(s), max credits 24, 24 completions allowed;
Instructor: Harkins,Arthur 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 information.
Style: Online
Grading: See attached syllabus

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

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**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 6051 Advanced Group Practice**

A-F only, 2 credit(s);

**Instructor:** Sutherland PhD, LP, RJohn

**Description:** Trends/developments in group counseling. Evidence-based group processes/techniques for individuals with chronic/persistent mental illness, substance use disorders, co-occurring disorders. Field placement component.

**IBH 6061 Applied Advanced Diagnostics I**

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 6061 Applied Advanced Diagnostics I**

A-F only, 2 credit(s), max credits 3, 1 completion allowed;

**Instructor:** Armstrong, Nicole

**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**
IBH 6091 Intersection of Career and Mental Health
A-F only, 2 credit(s);
Instructor: Rohovit, Julie L
Description: Student may contact the instructor or department for information.

IBH 6101 Family Dynamics and Therapy
A-F only, 3 credit(s);
Instructor: Everts, Jessie Claire
Description: Student may contact the instructor or department for information.

IBH 6222 Adolescents and Co-occurring Substance Use and Mental Health 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. Adolescents/co-occurring substance use/mental health disorders.
Style: Online
Grading: See attached syllabus.

IBH 6227 Supervision Models and Methods in Integrated Behavioral Health
A-F only, 3 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.
Style: Online
Grading: See attached syllabus

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 6231 Management of Eating Disorders
3 credit(s);
Instructor: Lampert, Jillian Garnet
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 6910 Topics in Integrated Behavioral Health
A-F only, 1 credit(s), max credits 32, 8 completions allowed;
Instructor: Wamsley, Debra S
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

### Inter-College Program 20 Ruttan Hall

**ICP 3101W Inter-College Program Proposal Development**
- A-F only, 2 credit(s);
- Meets CLE req of Writing Intensive
- **Instructor:** Burger Sanchez, Amy
- **Description:** Write proposal of study/formulate plan of courses through which to complete degree.

**ICP 3201 Career and Internship Preparation**
- A-F only, 1 credit(s);
- **Instructor:** Newberg, Sara Nagel
- **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.

### 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:** Schmidt Whitney, Angie
- **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
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: 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.
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-scale 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 3612 Lighting Design  
A-F only, 3 credit(s);  
Instructor: Asojo, Abimbola  
Description: Student may contact the instructor or department for information.

IDes 3622 Computer Applications II  
A-F only, 2 credit(s);  
Instructor: Asojo, Abimbola  
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: 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: 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 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: 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: 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: 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:** 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:** 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:** 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:** 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: 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: Zollinger, Stephanie Watson
Description: Student may contact the instructor or department for information.

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

International Business 2-210 Carlson School of Management

IBus 2950 Tracing the Global Supply Chain
A-F only, 2 credit(s);
Instructor: Huchendorf, Steven Craig
Description: Student may contact the instructor or department for information.

IBus 3002 Managerial Accounting in Argentina
A-F only, 4 credit(s);
Instructor: Forester, Clayton L
Description: Student may contact the instructor or department for information.

IBus 3080 Sustainability and Corporate Social Responsibility in Costa Rica
A-F only, 4 credit(s);
Instructor: Smith, Tim
Description: Student may contact the instructor or department for information.

IBus 4050 Management of Innovation and Change
A-F only, 4 credit(s); [Mgmt 1001 or 3001 or 3010], approved application Credit will not be granted if credit has been received for: MGMT 4050;
Instructor: Spruth, Steve
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: Goodyear, Steve
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: Werner, Seth E
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: Moser, Helen
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: Lipe, Jay
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 3015 Reading, Conversation, and Composition**

4 credit(s);

**Description:** Italian 3015 is a reading-, writing-, and speaking-intensive course. Through a variety of Italian texts and related readings, students will analyze the material both textually and grammatically, exploring their social, historical and cultural relevance. This course is recommended for students who have mastered basic Italian grammar and received a grade of B or higher in preceding Italian coursework.

**Exam Format:** Active participation in class discussions, written essays, comprehensive exams, in-class presentations

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**Ital 3305 Staging the Self: Theater and Drama in Modern Italy**

4 credit(s), max credits 16, 4 completions allowed; 3015

**Credit will not be granted if credit has been received for:** ITAL 5305;

**Instructor:** STAFF
Theatrical representations of the self in modern Italy. Particular attention is given to issues of identity, gender, and class in theatrical works ranging from Alfieri's Mirra, Pirandello's Enrico IV to Dacia Maraini's Clytemnestra.

Ital 3459W Senior Project
1 credit(s); Meets CLE req of Writing Intensive
Instructor: Fabbri, Lorenzo
Description: Student may contact the instructor or department for information.

Ital 3850 Topics in Italian Cinema: Neorealism and World Cinemas
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Fabbri, Lorenzo
Description: TRANSNATIONAL NEOREALISM: ITALIAN CINEMA IN THE LIGHT OF GLOBALIZATION Drawing from recent scholarship on neorealism and more broadly from the "global turn" in cultural studies, this semester we will tackle Italian neorealism a transnational phenomenon. First we will investigate the influence of French naturalism and cinematic realism on 1930s Italian cinema. Then we will scrutinize the canonical films of Italian neorealism to grasp the crucial features of this cinematic movement and understand why it has been awarded the status of keystone in film history. Finally, we will explore the after-life of neorealism, by tracking the role that Italian films had in the emergence of new cinemas and new waves worldwide. The ultimate goal of this course is to locate Italian neorealism within wider European and global networks, while familiarizing students with the key terms, concepts, and techniques of film analysis. IN ENGLISH

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

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: 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: Lavecchia, Ornella
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 4004 Intermediate Italian
2 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: ITAL 1004;
Instructor: Rider, Kathleen Marie
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
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 I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Tazawa,Kenichi
Description: This course is the first of a two-semester sequence of Beginning Japanese; it is for students who have no previous knowledge of Japanese. It aims to begin development of communication skills in Japanese. Therefore, we will work on the four basic skills of language (speaking, listening, reading, and writing) as well as culture-specific skills (do's and don'ts). The following topics are covered in this semester: 1. Meeting people for the first time 2. Shopping and eating out 3. Describing activities and extending/declining invitations 4. Describing locations and things in the past 5. Making offers and talking about travel 6. Making a request, asking for/giving permission, and talking about rules. The course will cover lessons 1 through 6 of Genki including both dialogue/grammar and reading/writing. It is expected that, by the end of this semester, students will have basic conversation skills in situations like those noted above, as well as rudimentary literacy in Japanese. Two types of Japanese characters (hiragana and katakana), as well as 58 Chinese characters (kanji) will be learned.
Style: 25% Lecture, 75% Discussion.
Grading: Lesson Tests 35% (5 times) Oral Interviews 10% (2 times) Dialogue Checks 10% (Each Lesson)

Jpn 1011 Beginning Japanese I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Buchanan,Michiko Todokoro
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 1011 Beginning Japanese I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Matsumoto,Fumiko
Description: Student may contact the instructor or department for information.

Jpn 1011 Beginning Japanese I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Crandol,Michael E
Description: Student may contact the instructor or department for information.

Jpn 1011 Beginning Japanese I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Frayeh Yazawa,Farah
Description: Student may contact the instructor or department for information.
Jpn 1011 Beginning Japanese I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Inada, Minori
Description: Student may contact the instructor or department for information.

Jpn 1011 Beginning Japanese I
5 credit(s), max credits 6, 1 completion allowed; Credit will not be granted if credit has been received for: JPN 4001;
Instructor: Mita, Ayumi
Description: Student may contact the instructor or department for information.

Jpn 3021 Intermediate Japanese I
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). It is divided into three types of classes: Lectures; Discussions (Speaking practice sessions); Reading discussions. Students are expected to express what they know and/or what they think in new words and grammatical structures. The course aims to develop the four communication skills (speaking, listening, reading, and writing) on the intermediate level, as well as culture-specific skills (do's and don'ts). The items that will be covered in this term include, but are not limited to: (1) Telling what you can or cannot do; (2) Describing gift giving/receiving situations; (3) Explaining things in detail; (5) 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 will also 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 before 2013. The placement test will be given before the fall semester 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: 30% Lecture, 70% Discussion.

Jpn 3021 Intermediate Japanese I
5 credit(s); 1012 or instr consent Credit will not be granted if credit has been received for: JPN 4003;
Instructor: Kawakami, Keiko
Description: Student may contact the instructor or department for information.

Jpn 3021 Intermediate Japanese I
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 I
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 I
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 I
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 4001 Beginning Japanese I
3 credit(s); Grad student Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Buchanan, Michiko Todokoro
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 4001 Beginning Japanese I
3 credit(s); Grad student Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Matsumoto, Fumiko
Description: Student may contact the instructor or department for information.

Jpn 4001 Beginning Japanese I
3 credit(s); Grad student Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Crandol, Michael E
Description: Student may contact the instructor or department for information.

Jpn 4001 Beginning Japanese I
3 credit(s); Grad student Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Frayeh Yazawa, Farah
Description: Student may contact the instructor or department for information.

Jpn 4001 Beginning Japanese I
3 credit(s); Grad student Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Inada, Minori
Description: Student may contact the instructor or department for information.

Jpn 4001 Beginning Japanese I
3 credit(s); Grad student Credit will not be granted if credit has been received for: JPN 1011;
Instructor: Mita, Ayumi
Description: Student may contact the instructor or department for information.

Jpn 4003 Intermediate Japanese I
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). It is divided into three types of classes: Lectures; Discussions (Speaking practice sessions); Reading discussions. Students are expected to express what they know and/or what they think in new words and grammatical structures. The course aims to develop the four communication skills (speaking, listening, reading, and writing) on the intermediate level, as well as culture-specific skills (do's and don'ts). The items that will be covered in this term include, but are not limited to: (1) Telling what you can or cannot do; (2) Describing
gift giving/receiving situations; (3) Consulting; (4) Explaining things in detail; (5) 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 will also 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 before 2013. The placement test will be given before the fall semester 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: 30% Lecture, 70% Discussion.

Jpn 4003 Intermediate Japanese I
3 credit(s); 4002, grad student
Credit will not be granted if credit has been received for: JPN 3021;
Instructor: Kawakami, Keiko
Description: Student may contact the instructor or department for information.

Jpn 4003 Intermediate Japanese I
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 I
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 I
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 I
4 credit(s);
Instructor: Buchanan, Michiko Todokoro
Description: Student may contact the instructor or department for information.

Jpn 5040 Readings in Japanese Texts
A-F only, 3 credit(s), max credits 9, 3 completions allowed;
Instructor: Isaka, Maki
Description: Student may contact the instructor or department for information.

Jpn 5211 Introductory Classical Chinese I
3 credit(s); Two years of an East Asian language (Chinese, Japanese, Korean) or equivalent or instr consent
Credit will not be granted if credit has been received for: CHN 5211;
Instructor: Rouzer, Paul F
Description: An introduction to the vocabulary and grammar of classical (literary) Chinese, taught through analysis and translation of early Chinese texts. The course is conducted in English and is open to students who are moderately comfortable with Chinese characters (the equivalent of at least two years of study in Chinese, Japanese, Korean or Vietnamese recommended). Reading includes short anecdotes from Han-era texts; selections from Sima Qian's biographies; and further materials to be announced.
Style: 25% Lecture, 75% Discussion.
Grading: 25% mid exam, 35% final exam, 15% quizzes, 25% class participation.
Exam Format: Take home translation

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
In the mid-twentieth century, fragments from roughly 900 manuscripts (or scrolls) were discovered in caves near the Dead Sea; they date from the late third century B.C.E. to the first century C.E., and the vast majority were compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

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: STAFF
Description: The Hebrew Bible and Old Testament are literary collections that modern Jewish and Christian traditions maintain as important, but these collections were initially produced by ancient Israelite scribes who composed and/or compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

JwSt 3034 Introduction to Jewish History and Civilization

3 credit(s); Credit will not be granted if credit already received for: JwSt 1034/3034/RelA 1034/3034 RelS
1034/3034 Credit will not be granted if credit has been received for: JWST 1034; Meets CLE req of Historical Perspectives
Instructor: 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
Instructor: STAFF
Description: The Hebrew Bible and Old Testament are literary collections that modern Jewish and Christian traditions maintain as important, but these collections were initially produced by ancient Israelite scribes who composed and/or compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

JwSt 3204 Dead Sea Scrolls

3 credit(s); Credit will not be granted if credit has been received for: JWST 5204;
Instructor: STAFF
Description: In the mid-twentieth century, fragments from roughly 900 manuscripts (or scrolls) were discovered in caves near the Dead Sea; they date from the late third century B.C.E. to the first century C.E., and the vast majority were
composed in Hebrew (some in Aramaic and even fewer in Greek). In reading selected portions of these scrolls (in translation), this course will focus on the key ways that the discovery of these scrolls significantly changed the study of Judaism during Hellenistic and Roman rules. Namely, the course will examine how the scrolls have changed scholars' views about the transmission of biblical texts in antiquity and the extent to which the literary production of Jewish authoritative writings continued during this time period. The course will also examine the Jewish sectarian writings of the Dead Sea Scrolls and the scholarly debate about the archaeological site of Qumran, which was a settlement near some of the caves where the scrolls were found.

**JwSt 3502 Ancient Israel: From Conquest to Exile**

3 credit(s); Knowledge of Hebrew not required, 3501 recommended credit will not be granted if credit already received for: ANE 3502/5502, RelA 3502/5502

**Instructor:** von Dassow, Eva

**Description:** Israel and Judah were not states of great importance in the ancient Near East. Their population, territory, and economy were small, and they could not resist conquest by larger, more powerful states like Assyria and Rome. So why is their history significant still? The historical experiences of the people of ancient Israel and Judah were transmogrified in literary form into the Hebrew Bible (Old Testament), which became the foundation and wellspring for much of Western and Islamic civilization. Innumerable aspects of modern history and culture are predicated on some element of Israel's ancient past, as mediated to us through the Bible; so it behooves us to understand that past. But the Bible is a religious work, not a transcript of events, and it is not the only source of information about ancient Israel. Archaeological excavations have revealed the physical remains of the cultures of Israel and neighboring lands, as well as bringing to light documents, inscriptions, and literary works produced by these cultures. This course treats the history of ancient Israel and Judah from the Late Bronze Age through the period of Roman rule, on the basis of archaeological, epigraphic, and literary sources. Historical study entails inquiring into the ideology of the sources, including the Bible. Implicit in the methods of inquiry are questions about how historical knowledge is created. Students taking the course for graduate credit will do additional reading and a research paper.

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

**Grading:** 20% final exam, 45% reports/papers, 20% quizzes, 15% class participation.

**Exam Format:** Essays, short IDs, maps

**JwSt 3603 Jews and Muslims in Medieval Iberia**

3 credit(s); Credit will not be granted if credit has been received for: SPAN 3603; Meets CLE req of Arts/Humanities

**Instructor:** Hamilton, Michelle Marie

**Description:** This course fulfills the Liberal Education requirement in Arts/Humanities. This course examines the cultural production of Sephardic Jews and Andalusi Muslims. Through a reading of the poetry of such authors as al-Mutamid, Ibn Khafaja, Samuel ha-Nagid and Moses Ibn Ezra, the prose fiction of al-Saraqusti, Judah al-Harizi and Juan Ruiz, and the philosophical treatises of Ibn Tufayl, Averroes and Maimonides we will explore how the extensive cultural assimilation among these groups in medieval al-Andalus complicates notions of identity (confessional, linguistic and ethnic), subalterity and postcoloniality commonly associated with modernity. While the Arab Andalusi scholars whose works we read combine ideas from the Muslim East (Baghdad) with both Greco-Roman and what we think of Western European traditions to create what scholars of both Spanish and Arabic literature and culture recognize as uniquely Andalusian, the Jewish authors of al-Andalus take this unique Arabo-Andalusi tradition and adapt it to their own inherited cultural traditions to create a corpus of literary, philosophical and theological works that ultimately changed the nature of Judaism itself. Even once most of the courts and lands of Muslim al-Andalus had been conquered by Christians, these Andalusi traditions survived thanks to one of the most impressive translation movements of the Middle Ages, namely that of eleventh- through thirteenth-century Toledo, and in later centuries thanks to the diligent activities of the Muslim and Jewish minorities living in Christian lands, who were often forced to hide their literature and practice their religious rituals in secret. In the final weeks of the class we will explore how the literary, historical, philosophical and theological works of the major Jewish and Muslim thinkers of medieval Iberia studied in the first part of the class survived in different forms among later Spanish Christian intellectuals. Taught in English.

**JwSt 3729 Nazi Germany and Hitler's Europe**

3 credit(s); Credit will not be granted if credit has been received for: HIST 3729; ANE 3729/5729

**Instructor:** Cohen, Gary B.

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

**JwSt 4000W Final Project, Writing Intensive**

A-F only, 4 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Levinson PhD, Bernard M.

**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
**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:** STAFF

**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 1001H Honors: Introduction to Mass Communication**

A-F only, 3 credit(s); Honors, [pre-jour or non-jour major] Credit will not be granted if credit has been received for: JOUR 1001; Meets CLE req of Social Sciences; meets CLE req of Technology and Society

**Instructor:** STAFF

**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 1501 Digital Games, Sims and Apps: Storytelling, Play and Commerce**

3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Technology and Society

**Instructor:** STAFF

**Description:** Digital games are one of the fastest growing sectors of the entertainment media industry, generating enormous profits for game companies and having a wide-ranging impact on our culture and society. Related developments in mobile applications and virtual-reality simulations are also becoming more than big business; they're changing the very way we think about media, augmented reality, and our human relationships. In this course, students will:

- Be introduced to the academic study of video games, computer simulations, and mobile (game) applications; all part of a growing discipline known as Game Studies.
- Examine digital games as forms of communication and interactive storytelling, as well as games as entertainment, in commerce, for social activism, in professional training, and in education.
- Consider the social impact of smartphones, their applications, and their uses in contemporary life; both for gameplay as well as communication more generally.
- Discuss next-generation virtual reality technology that may change the way we think about immersive media experiences.
- Study the history, ethics, and socio-cultural impact of digital games and related technologies.

Additional course information can be found at:
https://docs.google.com/a/umn.edu/document/d/106wM9gNtv4p2vkDN81dw28XpxvaMwOEH9_e7QwcO28M/edit

**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:** Hansen, Kathleen Ann

**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 3005 Mass Media Effects
3 credit(s); Meets CLE req of Social Sciences
Instructor: STAFF
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); [3004W or 3004V or Concurrent registration is required (or allowed) in 3004W or 3004V], [jour major or admitted pre-jour or approved BIS/IDIM/ICP program] Credit will not be granted if credit has been received for: JOUR 3101H;
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 requires outside research (reporting) that includes interviewing, basic fact gathering and document search.

Jour 3101 News Reporting and Writing
A-F only, 3 credit(s); [3004W or 3004V or Concurrent registration is required (or allowed) in 3004W or 3004V], [jour major or admitted pre-jour or approved BIS/IDIM/ICP program] Credit will not be granted if credit has been received for: JOUR 3101H;
Instructor: Reynolds, Chelsea J
Description: Student may contact the instructor or department for information.

Jour 3102 Multimedia Production and Storytelling
A-F only, 3 credit(s);
Instructor: Broeckert, Jerry
Description: Student may contact the instructor or department for information.
Jour 3103 Interactive and Data Journalism
A-F only, 3 credit(s);
Instructor: Libin, Scott M
Description: Student may contact the instructor or department for information.

Jour 3121 Intermediate News Reporting
A-F only, 3 credit(s);
Instructor: Ison, Christopher John
Description: This is a class tailored to undergraduate journalism majors in the news/editorial sequence. Students will learn how to report on the people, events and institutions that make up the most fundamental news beats in any newsroom. They'll learn by doing - hitting the streets to find news stories at city hall, the police department, the courthouse, etc. They'll need to apply what they learned in Journalism 3101 (Newswriting) and the additional writing skills they learn during the semester in this class. The class will emphasize how to find and use public records for news stories, how to find and interview sources and how to organize information so that stories are interesting and understandable to readers. The instructor will emphasize class discussion to learn about reporting methods, ethics and news judgment. Students will be required to read the newspaper every day and be able to think critically and discuss the news in class. By the end of the semester, students will understand how newsrooms work, and how good reporters produce accurate, high-quality stories for print and broadcast.
Style: 40% Lecture, 40% Discussion. TV news viewing, guest speakers, in-class exercises, etc.
Grading: 100% reports/papers. Occasional quizzes, as well as attendance and class participation could factor in to grades.

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

Jour 3241 Advertising Strategy and Creative Development
A-F only, 3 credit(s);
Instructor: Mitsch, Len
Description: Student may contact the instructor or department for information.

Jour 3241 Advertising Strategy and Creative Development
A-F only, 3 credit(s);
Instructor: Johnson, Jennifer M
Description: This course introduces students to creative strategic development and conceptual thinking in advertising. They will develop creative ideas 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: Sieck, Katharine Anne
Description: Student may contact the instructor or department for information.

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: Fittipaldi, Diane
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: Malmo, Deborah Marie Ob
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: Neibergall Anderson, Betsy
Description: Student may contact the instructor or department for information.

Jour 3279W Professional Writing for Strategic Communication
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Reid, Victoria Jane
Description: Jour 3279 is a professional skills course focusing on the development of essential writing capabilities and tactical thinking required for the public relations profession. The course is designed to help students gain experience in researching, interviewing, writing and producing materials used by public relations practitioners. These include: professional biographies, press releases, fact sheets, backgrounders, media alerts, and speeches. Campaign tactics will be discussed throughout the course to provide a strong understanding of the public relations process.
Jour 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: Andre, Susan L
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 TV, Radio and Digital News Reporting
A-F only, 3 credit(s);
Instructor: Libin, Scott M
Description: Student may contact the instructor or department for information.

Jour 3552 Internet and Global Society
3 credit(s); Meets CLE req of Global Perspectives
Instructor: STAFF
Description: This course examines how the Internet, as a decentralized and de-territorialized network, is connected with media and life in a globalized world. The course is both issue- and country-oriented, exploring how issues of digital technologies -- such as social/mobile media and activism, copyright and piracy, and e-commerce and government regulation -- intersect with politics, economics, technology, and society at the level of nation-states and cultures. A variety of theories or perspectives relevant or related to new media and global communication will be considered to help make sense of the interplay between Internet and society in a global setting. This course is roughly divided into two parts: conceptual and practical perspectives on Internet governance, and critical issues facing states and citizens at the global level. The division is designed to examine the structure and processes of the Internet and global society in both the theoretical and practical space. Because of the rapid growth of the Internet-related technologies (e.g., smartphones, social networks, and SMS tools in the developing world), it is difficult to survey the current Internet conditions and developments in all countries. The readings and discussions hence place special emphasis on a few select countries that may help illustrate how and why the Internet is revolutionizing the world's geopolitical and socio-cultural landscape. Specifically, we investigate (1) the political, cultural, social, technological, and economic conditions that shape and are shaped by the presence of the Internet at the national and cross-national levels; (2) the effects of the Internet on the form and content of mass communication at the global level; and (3) the implications of the Internet use for human and social relations across national borders.

Jour 3614 History of Media Communication
3 credit(s); Meets CLE req of Historical Perspectives; meets CLE req of Technology and Society
Instructor: STAFF
Description: This course examines the history of media communication through the window of changing media technology. 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?8 survey of diverse historical times directly is: How have new communication technologies affected society through time? The class is in part a study of history and in part the ?doing? of history?research is integral to the curriculum. Students are required to attend the lectures, to participate in small-group discussions, to study the assigned readings, and to complete a mid-term and a final examination as well as a brief research paper.

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.
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: STAFF

Description: Mass Media and Popular Culture have come to play a significant role in defining the ways in which we make sense of various issues—from the mundane to the serious—and the world around us. Through particular representations of ‘reality’ media designate certain norms and values over others. This course will provide a historical overview of mass media and popular culture and focuses on the theoretical debates surrounding them. However, in contemporary world these debates have been complicated by the expanding range of popular culture which circulates across the nations. The course will mainly focus on American media (television, films, advertisements, etc.), but will also take a look at European, Latin American, African and Asian contexts. Some of the thematics the course would cover includes issues of media production and consumption, globalization, cultural imperialism, race, class, gender in media and popular culture.

Style: 60% Lecture, 25% Discussion.

Grading: 25% mid exam, 25% final exam, 40% reports/papers, 10% special projects.

Exam Format: Multiple Choice and Essay

Mass Media Ethics: Moral Reasoning and Case Studies

3 credit(s); Meets CLE req of Civic Life and Ethics

Instructor: STAFF

Description: This course will help students build a foundation for making ethical decisions under the kinds of difficult circumstances that journalist and strategic communication professionals face every day. Most of our discussion will focus on processes we could use to make ethical judgments. Students will learn ethical principles and standards that could be applied in ethical decision-making. The class will study actual cases drawn from many media sources. Students will be expected to participate by presenting their own examples of ethical dilemmas found in the media. That means students should be reading the newspapers and staying abreast of news every day. It also means that attendance and class participation is essential in this course.

Mass Communication Law

3 credit(s); Credit will not be granted if credit has been received for: JOUR 3776H

Instructor: STAFF

Description: Course objective: to allow undergraduates to gain a basic understanding of mass media law by reading and analyzing significant court decisions and statutes affecting legal rights and privileges of journalists. We will 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 journalism. Course requires thorough preparation by reading primary source material as well as assigned textbook. Students must submit "briefs" (1-2 pages) of selected cases, prepare a short (5-10 pages) original research paper, write their own opinion in a First Amendment case (4-6 pages), and take two exams. Class participation is strongly encouraged. Format is primarily lecture/socratic dialogue.

Mass Media and Politics

3 credit(s);

Instructor: STAFF

Description: Mass Media and Politics focuses on the historical and contemporary dynamics shaping the symbiotic relationship between mass media and politics. The major mass media forms will be explored, as well as the dynamics involving media ownership, regulation, guidance, ethics as well as press freedom issues. Specific reporting rituals will be covered as well as differences in covering the separate branches of government. Particular attention will also be paid to political messages and advertising.

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.

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.

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: 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 B
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: 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: 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: Libin, Scott M
Description: Student may contact the instructor or department for information.
Jour 3996 Directed Internship
S-N only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Johnson, Jennifer M
Description: Student may contact the instructor or department for information.

Jour 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 4171 Covering the Arts
A-F only, 3 credit(s);
Instructor: STAFF
Description: JUNGLE VOYAGE What artists want from critics is better reviews. And they deserve them. Not rave reviews, necessarily, but informed ones. Readers want them too. And editors require them. Anyone with a smartphone can have an opinion these days. An expert critic knows his/her field from the bottom up, starting with what goes on in the workroom. That was the thinking behind J4171: Covering the Arts -- Backstage at the Jungle Theater. Having taught arts reviewing at Murphy Hall for ten years, I wanted to try a course that combined writing about the arts and observing the artistic process firsthand. My first effort, a backstage course at the Guthrie Theater's A Christmas Carol, went nicely, but I thought we'd learn more working with a smaller theater. When the Jungle Theater came to the J School suggesting a partnership, we were in business. Here's how the class works. On Mondays we meet at Murphy Hall arts-writing workshop. On Wednesdays we meet at the Jungle to watch a rehearsal or to discuss the craft of the theater with an actor (Claudia Wilkens, Barbara Kingsley); a playwright (Craig Wright); a lighting designer (Barry Browning.) Or we meet an arts journalist (Star Tribune film critic Chris Covert) or editor (Daily Planet arts editor Jay Gabler.) Equally important, we find out about the business side of theater. How does the boxoffice work? How does the Jungle market a show? How does the board of directors deal with a cash crunch? Also on hand is the Jungle's executive director, Margo Gisselman. She starts off the Wednesday class by sharing the theater's good and bad news since last week—the grant that finally came through; the flood in the ladies room. Although the course focuses on the Jungle, it's also about the ebb and flow of any artistic enterprise. The theater receives an an honorarium from the J School for its contribution, but for artistic director Bain Boehlke that's not the point. ?We like having students around,? he says. "It keeps us honest."
Style: 50% Discussion, 50% Field Trips.
Grading: 20% final exam, 10% special projects, 40% written homework, 30% class participation.
Exam Format: Final Exam: Part multiple-choice, to show what you've learned over the semester; part essay, to show your progress as a writer.

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 M
Description: This course introduces students to advertising creative development and conceptual thinking. Students will work in teams that include account planners, copywriters, and art directors. They will develop creative strategy briefs and present ideas based on their strategies. At the end of the term, successful students will be able to apply practical creativity to advertising ideas and will have a basic understanding of how to put a book together to get a job in advertising.
Style: 30% Lecture, 20% Laboratory. This class is highly interactive. Students must contribute to class creative exercises and assignments during each meeting.
Grading: A midterm creative review and a final creative review, by advertising professionals, will help determine final grades. Completion of assignments and level of improvement will also weigh heavily on grade. Student participation is critical.

Jour 4251 Psychology of Advertising
3 credit(s); Credit will not be granted if credit has been received for: JOUR 5251;
Instructor: STAFF
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.

Jour 4259 Strategic Communication Case Analysis
A-F only, 3 credit(s);
Instructor: Neibergall Anderson, Betsy
Description: Student may contact the instructor or department for information.

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: Wehrenberg, Steven James
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 4263 Strategic Communication Campaigns
A-F only, 3 credit(s);
Instructor: Moorhouse, Bruce Thompson
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: STAFF
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.

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 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 and Culture is a critical exploration of how new media communication technology has shaped and been shaped by culture and society. Using the liberal arts as a springboard, the course questions and interrogates the impact of social and digital media in our daily lives as well as its influence upon media industries, politics, our bodies, and culture in general. Recent topics discussed the role of "big data" in society, the effect of the Internet on the news industry, how media becomes viral, as well as the impact of mobile apps and social media on social processes as well as on our brain.

**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 4721 Mass Media and U.S. Society**

3 credit(s);Credit will not be granted if credit has been received for: JOUR 4721H;Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences

**Instructor:** STAFF

**Description:** Are the news media doing a good job? How can you tell? Does it matter? Is The Daily Show the best news program on television? Why or why not? Most people seem to have an opinion about all of these questions. Most discussions seem to center on one of four themes: 1) who owns the media and what they care about; 2) media credibility and bias; 3) whether entertainment is replacing or enhancing information; and 4) to what extent is the Internet changing everything about the way the media work. Mass Media and U.S. Society will explore the validity and importance of these themes in terms of what roles can the media play in society, what roles does it play, and how have those roles changed over time. The course will draw on ideas from various social sciences to develop tools for discussing a number of specific issues related to these themes. The class format will be a mix of lecture and discussion. Required reading for the course will center on the one text for the course: The Press. There will be a midterm, a final and 3-4 short writing exercises.

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**Jour 4721H Mass Media and U.S. Society**

A-F only, 3 credit(s);HonorsCredit will not be granted if credit has been received for: JOUR 4721;Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences

**Instructor:** Doyle, Kenneth Owen

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

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**Jour 4733H Honors Thesis Seminar**

A-F only, 3 credit(s);Meets CLE req of Writing Intensive

**Instructor:** Wackman, Daniel B

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

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**Jour 4990 Special Topics in Mass Communication: Professional: Covering Sports Across the Media Landscape**

A-F only, 3 credit(s), max credits 6;

**Instructor:** Moyer, J. Keith

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

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**Jour 4992 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.

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**Jour 4993H Honors: Projects**
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: 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: Williams, Jennifer Lisa
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 B
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: Golden, Gayle Celeste
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Kirtley, Jane E
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Eighmey, John
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Huh, Jisu
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Yzer, Marco
Description: Student may contact the instructor or department for information.
Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Johnson, Jennifer M
Description: Student may contact the instructor or department for information.

Jour 4993H Honors: Projects
A-F only, 3 credit(s);
Instructor: Thiel-Stern, Shayla
Description: Student may contact the instructor or department for information.

Jour 5131 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 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: STAFF
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.

Jour 5541 Mass Communication and Public Health
3 credit(s); Credit will not be granted if credit has been received for: PUBH 6074;
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 5777 Contemporary Problems in Freedom of Speech and Press
A-F only, 3 credit(s); Jour major or jour minor or approved BIS/IDIM/ICP program Credit will not be granted if credit has been received for: LAW 6030;
Instructor: STAFF
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: 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: 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 B
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: 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 8009 Pro-seminar in Mass Communication
S-N only, 1 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);
Instructor: Eighmey, John
Description: Student may contact the instructor or department for information.

Jour 8201 Factors Affecting Communication Strategy
A-F only, 3 credit(s);
Instructor: Kucharski, Matthew John
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: Ball, Jennifer
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: Watson, Brendan R
Description: Student may contact the instructor or department for information.

Jour 8602 Seminar: History of Mass Communication
A-F only, 3 credit(s);
Instructor: Dell’Orto, Giovanna
Description: This seminar provides opportunities to explore communication history’s scholarly traditions and dimensions, as well as some core literature and new trends in research (both quantitative and qualitative). In addition to critical analysis of specific assigned readings, the course includes: 1) Mass communication historiography (the history of the field); 2) The evolution of explicit and implicit theories and research methodologies and models; 3) Exploration of different types of mass communication histories. Topics are designed to introduce students to diversity in communication history—in scholarly approaches, in fields of interest, in conceptual frameworks, and in reflections of multiculturalism. The writing assignments and student-led class discussions aim to advance seminar members’ individual research projects. Meaningful class participation and the development of a research agenda are essential to succeed in this course.

Jour 8650 Seminar: Psychology of Media Effects
A-F only, 3 credit(s);
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: 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: 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: 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 B
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: 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.

Jour 8993 Directed Study
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
**Instructor:** Ball, Jennifer  
**Description:** Student may contact the instructor or department for information.

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**Jour 8993 Directed Study**  
A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;  
**Instructor:** Watson, Brendan R  
**Description:** Student may contact the instructor or department for information.

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**Kinesiology**  
**220 Cooke Hall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit(s)</th>
<th>Prerequisite</th>
<th>Style</th>
<th>Grading</th>
<th>Exam Format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kin 1050</strong></td>
<td>Beginning Military Physical Fitness Training</td>
<td>A-F only,</td>
<td>A-F only, 1 credit(s), max credits 4, 4 completions allowed;</td>
<td>80% Lecture, 15% Discussion.</td>
<td>14% mid exam, 14% final exam, 29% reports/papers, 3% quizzes, 23% written homework, 10% reflection paper, 7% in-class presentation.</td>
<td>Multiple choice / T-F</td>
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<tr>
<td><strong>Kin 1871</strong></td>
<td>Survey of Kinesiology, Recreation, and Sport</td>
<td>A-F only,</td>
<td>3 credit(s);</td>
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<tr>
<td><strong>Kin 3001</strong></td>
<td>Lifetime Health and Wellness</td>
<td>A-F only,</td>
<td>3 credit(s); Meets CLE req of Social Sciences</td>
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<tr>
<td><strong>Kin 3027</strong></td>
<td>Human Anatomy for Kinesiology Students</td>
<td>A-F only,</td>
<td>3 credit(s);</td>
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<tr>
<td><strong>Kin 3050</strong></td>
<td>Advanced Military Physical Fitness Training</td>
<td>A-F only,</td>
<td>1 credit(s), max credits 4, 4 completions allowed;</td>
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<tr>
<td><strong>Kin 3112</strong></td>
<td>Introduction to Biomechanics</td>
<td>A-F only,</td>
<td>4 credit(s);</td>
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</tbody>
</table>

**Instructor:**  
Ball, Jennifer  
Watson, Brendan R  
Axtell, Thomas E  
Rodgerson PhD, Richard W  
Axtell, Thomas E  
Betker, Morgan R  
Barr-Anderson PhD, Daheia Julina  
Biltz MD, George R  
STAFF

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

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**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

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**Kin 3001 Lifetime Health and Wellness**  
A-F only, 3 credit(s); Meets CLE req of Social Sciences  
**Instructor:** Betker, Morgan R  
**Description:** Student may contact the instructor or department for information.

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**Kin 3001 Lifetime Health and Wellness**  
A-F only, 3 credit(s); Meets CLE req of Social Sciences  
**Instructor:** Barr-Anderson PhD, Daheia Julina  
**Description:** Student may contact the instructor or department for information.

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**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.

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**Kin 3050 Advanced Military Physical Fitness Training**  
A-F only, 1 credit(s), max credits 4, 4 completions allowed;  
**Instructor:** Axtell, Thomas E  
**Description:** Student may contact the instructor or department for information.

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**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 3112 Introduction to Biomechanics  
A-F only, 4 credit(s);  
Instructor: Aman PhD, Joshua Emanuel  
Description: Mechanical principles governing human motion. Human bone, muscle, and neurophysiology. Measurements of human performance. Clinical/applied sport biomechanics. Lab introduces technology for assessing human motor function such as electromyography or force sensors.

Kin 3114 Prevention and Care of Athletic Injuries  
A-F only, 3 credit(s);  
Instructor: Osgood, Chad Thomas  

Kin 3126W Sport and Exercise Psychology  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Wiese-Bjornstal PhD, Diane M.  
Description: Sport and exercise psychology encompasses the thoughts, feelings, and behaviors of people in physical activity contexts. A foundations approach to theory and research in sport and exercise psychology is adopted in the course. This is a required course for undergraduate Kinesiology majors, and is an elective course for students in the coaching certificate or minor programs.  
Style: 60% Lecture, 10% Film/Video, 10% Discussion, 5% Laboratory, 5% Small Group Activities, 5% Student Presentation, 5% Demonstration.  
Grading: 15% mid exam, 15% final exam, 40% reports/papers, 15% additional semester exams, 5% in-class presentation, 10% laboratory evaluation.

Kin 3131W History and Philosophy of Sport  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Weiss PhD, Maureen  
Description: Introductory description and interpretation of the historical and philosophical development of physical education and sport from primitive societies to 20th century civilization.

Kin 3132 Introduction to Motor Development Across the Lifespan  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description: Developmental aspects of human movement behavior/learning. Life span change of motor skills.

Kin 3135 Introduction to Motor Learning and Control  
A-F only, 3 credit(s);  
Instructor: Wade PhD, Michael G  
Description: This course reviews the elements that account for how we coordinate and control the range of human motor skills that represent both our phylogenetic and ontogenetic development. The course reviews both the theoretical ideas and the functional ways in which humans acquire motor skills and the variables that can both enhance and constrain the learning of motor skills. The content includes both lecture and laboratory experiences.

Kin 3135 Introduction to Motor Learning and Control  
A-F only, 3 credit(s);  
Instructor: 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 3179 Track and Field 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 3327 Teaching Physical Education in the Elementary School
A-F only, 2 credit(s);
Instructor: Mayer, Adam
Description: Student may contact the instructor or department for information.

Kin 3327 Teaching Physical Education in the Elementary School
A-F only, 2 credit(s);
Instructor: Vollum, Matt
Description: Student may contact the instructor or department for information.

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 MA, 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: Snyder PhD,Eric Michael
Description: Student may contact the instructor or department for information.

Kin 3982 Research Methods in Kinesiology
A-F only, 3 credit(s);
Instructor: Stark,Andrea
Description: Student may contact the instructor or department for information.

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: 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 Mathison
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: Wade PhD, Michael G
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: 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: Barr-Anderson PhD, Daheia Julina
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 3993 Directed Study in Kinesiology
A-F only, 1-10 credit(s), max credits 10, 10 completions allowed;
Instructor: Inoue PhD, Yuhei
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: Wade PhD, Michael G
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

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: Rourk, Zachary Todd
Description: This course prepares the student to systematically design training and conditioning programs for athletes. This course utilizes periodization models with physiological adaptations to maximize human performance in the athletic arena.
Style: 80% Lecture, 20% Discussion.
Grading: 26% final exam, 10% reports/papers, 39% special projects, 16% written homework, 3% in-class presentation, 6% problem solving.

**Kin 4697 Student Coaching and Seminar**
S-N only, 3 credit(s);
Instructor: Ingraham PhD, Stacy Jean
Description: Student may contact the instructor or department for information.

**Kin 4941 Applied Sport Science**
OPT No Aud, 3 credit(s);
Instructor: Rourk, Zachary Todd
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 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 and Exercise for Health Promotion and Disease Prevention**

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
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 5371 Sport and Society  
A-F only, 3 credit(s);  
Instructor: Kane PhD, Mary Jo  
Description: The purpose of this course is to introduce students to social theories, research findings and principles in the field of Sport Sociology in order to analyze and understand the significance of sport in American society. Students will explore how one of the most powerful political, social and economic institutions in this country—sport—relates to broader cultural issues such as commercialization, gender equity, diversity and violence.

Kin 5505 Human-Centered Design - Principles and Applications  
3 credit(s); Credit will not be granted if credit has been received for: KIN 3505;  
Instructor: Smith, Thomas J  
Description: Human-centered design (also termed user-centered design, usability engineering, human engineering or universal design) is an interdisciplinary area of design study that focuses on how design can be tailored to address, accommodate, and meet human expectations, capabilities, needs, and limitations. The rationale for the course is that: 'good design makes things work better and last longer, helps make people and business more productive, and reduces discomfort and waste.' The basic premise for the course is that 'good' design means human-centered design (HCD). The course will address this premise from a number of different perspectives, considering HCD of fabricated artifacts, human-computer interfaces, built environments, and complex sociotechnical and organizational systems and environments. The course will offer a diverse mix of lecture, open discussion, design analysis projects, guest speakers, field site visits and evaluations, and differing cultural approaches to design.  
Style: 40% Lecture, 20% Discussion. student team presentations  
Grading: 75% reports/papers, 25% in-class presentation.

Kin 5511 Sport and Gender  
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: REC 5511;  
Instructor: Buysse PhD, Jo Ann  
Description: The primary purpose of this course is to provide students with an opportunity to critically examine and gain a deeper understanding of gender issues in sport and physical activity from both historical and contemporary perspectives. Students will be expected to analyze, critique, and evaluate a wide range of historical, cultural, economic, political, and socio-psychological issues that have shaped the nature and scope of women's participation in sport and physical activity in comparison to their male counterparts. Particular attention will be given to the various ways in which females (and their bodies) are often viewed as fundamentally different?physically, socially and psychologically?from their male counterparts. Much of this analysis will take place against the backdrop of highly organized, competitive sports at the national and international levels, however, access and inclusion of physical activity throughout the lifespan will also be addressed. We will also analyze social identity markers such as race/ethnicity, social class, (dis)ability and sexual orientation, in relation to the organization and management of sport and physical activity. As a graduate level course, it is expected that students will go beyond surface level knowledge and opinions and engage in critical reading and discussion of research.  
Style: 20% Lecture, 40% Discussion, 20% Small Group Activities, 10% Student Presentation, 10% Guest Speakers.  
Grading: 25% mid exam, 25% final exam, 25% reports/papers, 10% in-class presentation, 15% class participation.  
Exam Format: essay

Kin 5585 Pediatric Physiology and Health: Concepts and Applications  
A-F only, 2 credit(s);  
Instructor: Biltz MD, George R  
Description: Student may contact the instructor or department for information.

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 12, 3 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 12, 3 completions allowed;
Instructor: Weiss PhD, Maureen
Description: Student may contact the instructor or department for information.

Kin 5720 Special Topics in Kinesiology: Cellular and Molecular Exercise Physiology
3 credit(s), max credits 12, 3 completions allowed;
Instructor: Ji PhD, Li Li
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 Moodle, and incorporates emerging technology experiences into the course.
Style: 50% Lecture, 10% Film/Video, 10% Discussion, 10% Laboratory, 10% Small Group Activities, 10% Student Presentation.
Grading: 20% mid exam, 20% final exam, 30% reports/papers, 10% special projects, 5% attendance, 10% in-class presentation, 5% class participation.
Exam Format: Mixed method; typically a combination of multiple choice and essay questions

Kin 5801 Legal Aspects of Sport and Recreation
A-F only, 4 credit(s);
Instructor: Allison JD, Rayla Mathison
Description: Legal issues related to recreation, park, and sport programs/facilities in public/private sectors.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Biltz MD, George R
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: 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: Buysses 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: 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 Mathison
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Leon MD, Arthur S
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Kane PhD, Mary Jo
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Wade PhD, Michael G
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Smith, Thomas J
Description: Directed study of selected readings in kinesiology with an emphasis on the areas of human factors/ergonomics and motor performance and behavior.
Style: 100% Discussion.
Grading: 100% special projects.
Exam Format: no exams

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Wiese-Bjornstal PhD, Diane M.
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Konczak PhD, Juergen
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Dengel PhD, Donald Robert
Description: Independent study under tutorial guidance.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
Instructor: Snyder PhD, Eric Michael
Description: Student may contact the instructor or department for information.

Kin 5992 Readings in Kinesiology
A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
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: 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: Barr-Anderson PhD, Daheia Julina
  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 5992 Readings in Kinesiology
  A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;
  Instructor: Inoue PhD, Yuhei
  Description: Student may contact the instructor or department for information.

Kin 5995 Research Problems in Applied Kinesiology
  A-F only, 1-6 credit(s), max credits 6, 6 completions allowed;
  Instructor: STAFF
  Description: Selected topics in physical activity and human performance.

Kin 6596 Clinical Experience I: Physical Education
  S-N only, 4 credit(s);
  Instructor: Vollum, Matt
  Description: Student may contact the instructor or department for information.

Kin 8135 Seminar: Motor Control and Learning
  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: Wade PhD, Michael G
  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: 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 Mathison
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: Wade PhD, Michael G
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: 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: Barr-Anderson PhD, Daheia Julina
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.

Kin 8995 Research Problems in Kinesiology
S-N only, 1-12 credit(s), max credits 12, 12 completions allowed;
Instructor: Inoue PhD, Yuhei
Description: Student may contact the instructor or department for information.

Korean 220 Folwell Hall

Kor 1011 Beginning Korean I
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 I
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 1011 Beginning Korean I
5 credit(s); Credit will not be granted if credit has been received for: KOR 4001;
Instructor: Lee, Inhye
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 3021 Intermediate Korean I
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 I
4 credit(s); 3022 Credit will not be granted if credit has been received for: KOR 4005;
Instructor: Lee, Inhye
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 4001 Beginning Korean I
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 I
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 4001 Beginning Korean I
3 credit(s); Grad student Credit will not be granted if credit has been received for: KOR 1011;
Instructor: Lee, Inhye
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 4003 Intermediate Korean I
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 I
3 credit(s); 4004, grad student Credit will not be granted if credit has been received for: KOR 3031;
Instructor: Lee, Inhye
Description: Student may contact the instructor or department for information.

Kor 4041 Advanced Readings in Modern Korean I
4 credit(s);
Instructor: Cho, Hangtae
Description: Student may contact the instructor or department for information.

Kor 5140 Readings in Sino-Korean Texts
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Cho, Hangtae

Description: This course is designed to increase the students’ proficiency to advanced-high level in all aspects of modern Korean with a special emphasis on Sino Korean; Sino-Korean vocabulary and characters are necessary for advanced and superior level of knowledge in Korean. Sino-Korean characters are used differently from the same Chinese characters used in contemporary China in terms of pronunciation, meaning, and word formation. This course aims to prepare students for research or employment in a variety of Korea-related fields. Text materials are drawn from authentic sources including modern Korean literature, film, intellectual history, and readings on contemporary issues. Radio and TV broadcasts will also be included in the teaching materials. Texts will be selected, in part, according to student interests. With the instructor's guidance, students will conduct research projects based on specialized readings in their own fields of study. The research projects will be presented both orally and in written form at the end of the semester. This course will be mostly taught in Korean. 3 repeats are allowed.

Kor 5211 Introductory Classical Chinese I

3 credit(s); Two years of an East Asian language (Chinese, Japanese, Korean) or equivalent or instr consent Credit will not be granted if credit has been received for: CHN 5211;

Instructor: Rouzer, Paul F

Description: An introduction to the vocabulary and grammar of classical (literary) Chinese, taught through analysis and translation of early Chinese texts. The course is conducted in English and is open to students who are moderately comfortable with Chinese characters (the equivalent of at least two years of study in Chinese, Japanese, Korean or Vietnamese recommended). Reading includes short anecdotes from Han-era texts; selections from Sima Qian's biographies; and further materials to be announced.

Style: 25% Lecture, 75% Discussion.

Grading: 25% mid exam, 35% final exam, 15% quizzes, 25% class participation.

Exam Format: Take home translation

Kor 5993 Directed Studies

OPT No Aud, 1-5 credit(s), max credits 15, 3 completions allowed;

Instructor: STAFF

Description: Directed Studies in ALL and Asian languages are restricted to very special conditions, with the particulars established by the individual teacher upon department approval. Note: Directed Studies cannot be used to fulfill the core requirements of either the Major or Minor.

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 5480 Special Topics in Land and Atmospheric Science: Ecological Climatology

1-4 credit(s), max credits 6, 6 completions allowed;

Instructor: Snyder, Peter K

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

LAAS 5515 Soil Formation: Earth Surface Processes and Biogeochemistry

A-F only, 3 credit(s);

Instructor: Nater, Ed

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

LAAS 5515 Soil Formation: Earth Surface Processes and Biogeochemistry

A-F only, 3 credit(s);

Instructor: Yoo, Kyungsoo

Description: The course follows physical, biological, and chemical processes (1) that disintegrate rocks, form soils, and generate sediments and solutes and (2) that make soils an integral part of local to global biogeochemical cycles. The course focuses on the following INTERFACES: -Lands & Atmosphere; Lands & Rivers; Rocks & Soils -Molecules to Minerals; Minerals and Organic Matter to Soils; Soils to Hillslopes; Hillslopes to Catchments -Biogeochemistry vs. Physical Geomorphology -Organic vs. Inorganic -Descriptive vs. Process-Based Quantitative Approaches -Traditional vs. Modern Geophysical and Geochemical Tools -Human vs. Geological Time Scales -Anthropogenic vs. Geological Forcing

LAAS 8128 Land and Atmospheric Science Seminar

S-N only, 1.5 credit(s), max credits 3;
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 8195 Research Problems in Soils
  1-5 credit(s), max credits 10, 10 completions allowed;
  Instructor: Twine, Tracy E
  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: Pitt, David George
  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: 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 3413 Introduction to Landscape Architectural History
  A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Historical Perspectives
  Instructor: Bierbrauer, Anna Marie
  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 4160H Thesis/Capstone Project
A-F only, 2 credit(s), max credits 4;
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 Jr or sr Jr Credit will not be granted if credit has been received for: LA 5755; Meets CLE req of Technology and Society
Instructor: Musacchio, Laura R
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 5131 Geospatial Data Analysis and Design
A-F only, 3 credit(s);
Instructor: Geer, Samuel Lewis
Description: Student may contact the instructor or department for information.

LA 5131 Geospatial Data Analysis and Design
A-F only, 3 credit(s);
Instructor: Geer, Samuel Lewis
Description: Student may contact the instructor or department for information.

LA 5201 Making Landscape Spaces and Types
A-F only, 6 credit(s);
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 5202 Landscape Analysis Workshop
S-N only, 1 credit(s);
Instructor: Koepeke, John Albert
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: Vanagaite, Egle
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 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: Koepke, 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 5413 Introduction to Landscape Architectural History
A-F only, 3 credit(s);
Instructor: Bierbrauer, Anna Marie
Description: Student may contact the instructor or department for information.

LA 5576 Ecological Restoration Project Planning and Management
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: Musacchio, Laura R
Description: Student may contact the instructor or department for information.

LA 5771 Landscape Infrastructure and Systems I
A-F only, 3 credit(s), max credits 6;
Instructor: Favour, Joseph Richard
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: Koepke, John Albert
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: Favour, Joseph Richard
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
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 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

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: 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;
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 8402 Directed Studies in Landscape Architecture History and Theory
1-6 credit(s), max credits 12, 12 completions allowed;
Instructor: Christensen, Carrie Ann
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Martin, Roger B
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Krinke, Rebecca Jean
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Koepke, John Albert
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Galatowitsch, Susan M
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Pitt, David George
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hewitt, Clinton N
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Sykes, Robert D
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Miller, Kristine Frances
Description: Student may contact the instructor or department for information.

LA 8404 Directed Studies in Landscape Architecture Design
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 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 8554 Project Programming
A-F only, 2 credit(s), max credits 4;
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);
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);
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;
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 4951W Major Project  
4 credit(s); Meets CLE req of Writing Intensive  
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: 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: Olson, S. Douglas  
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: Seaberg, Ryan  
Description: Student may contact the instructor or department for information.

Lat 5100 Advanced Reading: Letters  
3 credit(s), max credits 18, 6 completions allowed;  
Instructor: Cole, Spencer E  
Description: This course will examine letters as a literary genre at Rome as well as a critical source for Roman political and social history. We'll study letters of Cicero and the Younger Pliny that provide us eyewitness accounts of some of the most pivotal moments in Roman history. We'll also read selections from the literary and philosophical epistles of Horace and Seneca and study their influence on later world literature. Together, these texts will give us a rich, kaleidoscopic view of Roman life. Among the topics we'll explore are: Roman business, literary culture, country life, gender roles, slavery, the eruption of Vesuvius, the treatment of Christians, gladiatorial games, family and marriage, philosophy and society, religion and festivals.

Lat 5800 Sight Reading for Graduate Students  
S-N only, 1 credit(s), max credits 6, 6 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: 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
Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Nappa, Christopher
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Smith, Stephen
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Gallia, Andrew B
Description: Student may contact the instructor or department for information.

Lat 5993 Directed Studies
1-4 credit(s), max credits 18, 18 completions allowed;
Instructor: Cole, Spencer E
Description: Student may contact the instructor or department for information.

Lat 8100 Readings in Latin Prose
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Nicholson, Oliver
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 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

Law School 285 Mondale Hall
Law 3000 Introduction to American Law
3 credit(s);
Instructor: Cooper, Laura J
Description: This is an introductory course in American law, providing an overview of a wide variety of constitutional, statutory and common law legal issues. A primary focus will be on American constitutional law: legislative, judicial, and executive powers; the legal structure of "checks and balances" among the three national governmental powers; the distribution of powers between the national government and state governments (federalism); and the constitutional rights of individuals (including rights of free speech, freedom of religion, due process, and equal protection). We will also examine the American system of litigation: the structure of the court system, the jurisdiction of federal (national) and state courts, and the litigation process, including methods for the resolution of conflict of laws (the determination of which of several potentially applicable laws should govern an issue). We will also address some common law substantive topics in American law including torts and contacts. Students will have the opportunity to learn how to read and interpret American legal materials, to do legal research within the legal system, and to write an analytical legal memorandum.

Law 3100 Lawyers in Film
2 credit(s);
Instructor: Cribari, Stephen Jon
Description: This course examines the influence Hollywood has had on how society perceives lawyers, the legal profession, and the ethical standards of the legal profession. Students will critically evaluate popular media, identify and evaluate ethical issues, and gain an increased understanding of the role in society played by lawyers and the legal system. In addition to viewing a variety of films and television programs, discussing them in class, and engaging in small group work, students will conduct research and write a paper on a law and/or ethics topic depicted in film and television programs. Undergraduate Honors students may register under 3100H. This course meets with Law 6111.

Law 3100H Lawyers in Film
A-F only, 2 credit(s);
Instructor: Cribari, Stephen Jon
Description: This course examines the influence Hollywood has had on how society perceives lawyers, the legal profession, and the ethical standards of the legal profession. Students will critically evaluate popular media, identify and evaluate ethical issues, and gain an increased understanding of the role in society played by lawyers and the legal system. In addition to viewing a variety of films and television programs, discussing them in class, and engaging in small group work, students will conduct research and write a paper on a law and/or ethics topic depicted in film and television programs. Undergraduate Honors students may register under 3100H. This course meets with Law 6111.

Law 5000 Introduction to the American Legal System
A-F only, 2 credit(s);
Instructor: Landsman, Maury S
Description: Student may contact the instructor or department for information.

Law 5003 Writing, Analysis & Persuasion
A-F only, 2 credit(s);
Instructor: Larson, Joelle Blomquist
Description: Student may contact the instructor or department for information.

Law 5025 Patent Law Proseminar I
A-F only, 1 credit(s); Credit will not be granted if credit has been received for: LAW 6925;
Instructor: Frank, Christopher Gregory
Description: Student may contact the instructor or department for information.

Law 5224 Patents
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: LAW 6224;
Instructor: Cotter, Thomas Francis
Description: Student may contact the instructor or department for information.

Law 5231 Patent Prosecution Practice I
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed; Credit will not be granted if credit has been received for: LAW 6231;
Instructor: Sieffert, Kent Joseph
Description: Student may contact the instructor or department for information.

Law 5250 Patent Portfolio Management
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: LAW 6250; 
Instructor: Jonas, Victor Petersen 
Description: Student may contact the instructor or department for information.

Law 6000 First Year Law Coursework 
A-F only, 16 credit(s); 
Instructor: Rachac, Carol Ude 
Description: Student may contact the instructor or department for information.

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: Schwarcz, Daniel 
Description:

Law 6002 Legal Research & Writing 
P-F only, 1 credit(s); 
Instructor: Schneider, Heidi Ann 
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing 
P-F only, 1 credit(s); 
Instructor: Nogosek, Kristine Kay 
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing 
P-F only, 1 credit(s); 
Instructor: Macaulay Esq, Jen M. 
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing 
P-F only, 1 credit(s); 
Instructor: Chandler, Pamela S 
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing 
P-F only, 1 credit(s); 
Instructor: Templin, Justin Lee 
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing 
P-F only, 1 credit(s); 
Instructor: Mortensen, David Richard 
Description: Student may contact the instructor or department for information.
Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Ruud, Ivory Leigh
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Behrens, Angela
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Renz, Christopher Paul
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Davis, Erica
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Mitchell, Kelly L
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Kerbaugh Esq, Steven C.
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Sawers, Michael M
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Soper, Christopher Day
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Hansen, David Andrew
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Webster, Matthew Paul
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Redford, Shaun David
Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
P-F only, 1 credit(s);
Instructor: Wood, Nadia V.
Description: Student may contact the instructor or department for information.
Law 6002 Legal Research & Writing
  P-F only, 1 credit(s);
  Instructor: Mulrooney, Garrett E.
  Description: Student may contact the instructor or department for information.

Law 6002 Legal Research & Writing
  P-F only, 1 credit(s);
  Instructor: Sanders, Tiffany Ann
  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.
  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: Carpenter, Dale
  Description: See description http://www.law.umn.edu/current/courseguide.html

Law 6014 Constitutional Law II
  A-F only, 3 credit(s);
  Instructor: Hasday, Jill E
  Description:

Law 6017 Humphrey Law Course
  P-F only, 2-3 credit(s), max credits 6;
  Instructor: Rudelius-Palmer, Kristi Lynn
  Description: Student may contact the instructor or department for information.

Law 6020 Introduction to American Law
  A-F only, 2 credit(s);
  Instructor: Delapena, Bradford
  Description: Student may contact the instructor or department for information.
Law 6021 Seminar: LL.M. Legal Research and Writing
A-F only, 2-3 credit(s), max credits 6;
Instructor: STAFF
Description: How to conduct legal research, interpret statutes, analyze cases, and write research papers and legal memoranda. Written English, style/form used by U.S. lawyers to present a legal argument.

Law 6025 Wrongful Convictions
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6030 Contemporary Problems in Freedom of 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 6037 Emerging Sciences and Technologies: Law, Ethics and Policy
A-F only, 3 credit(s);
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.

Law 6039 Great Cases
A-F only, 3 credit(s);
Instructor: Stein, Robert A
Description:

Law 6042 Nonprofits and Public Sectors Externships
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Cook, Nancy L.
Description:

Law 6044 Immigration Law Externship - Center for New Americans
P-F only, 2-3 credit(s), max credits 6;
Instructor: Cook, Nancy L.
Description: Student may contact the instructor or department for information.

Law 6045 Immigration Outreach and Education Externship - Center for New Americans
P-F only, 2 credit(s), max credits 4;
Instructor: Herder, Sarah M
Description: Student may contact the instructor or department for information.

Law 6049 Unincorporated Business Associations
A-F only, 3 credit(s);
Instructor: Sandberg, Christopher K
Description:

Law 6051 Business Associations/Corporations I
Law 6053 Analytical Methods for Lawyers: An Introduction  
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:

Law 6060 Assisted Reproduction and the Family  
A-F only, 3 credit(s);  
Instructor: Carbone, June Rose  
Description:

Law 6063 Law and Neuroscience  
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: Shen, Francis Xavier  
Description:

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 6109 Creditors' Remedies/Secured Transactions  
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: STAFF  
Description:

Law 6111 Lawyers in Film  
A-F only, 2 credit(s);  
Instructor: Cribari, Stephen Jon  
Description: Student may contact the instructor or department for information.

Law 6112 Accounting and Finance for Lawyers  
A-F only, 3 credit(s);  
Instructor: STAFF  
Description:

Law 6115 Civil Litigation: Case Development and Discovery  
A-F only, 2 credit(s);  
Instructor: Roen, Craig Matthew  
Description:

Law 6116 Pretrial Skills: Lawyering Process  
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;  
Instructor: STAFF  
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 6117 CL: Civil Rights Enforcement
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Samie, Bahram
Description:

Law 6126 Water Law
A-F only, 3 credit(s);
Instructor: STAFF
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 6200 Remedies
A-F only, 3 credit(s);
Instructor: STAFF
Description: Equity, damages, and restitution. The heaviest emphasis is upon equitable remedies in both public and private law cases. Temporary and permanent injunctions; contempt; equitable liens and constructive trusts. Equity, damages, and restitution. The heaviest emphasis is upon equitable remedies in both public and private law cases. Temporary and permanent injunctions; contempt; equitable liens and constructive trusts.

Law 6201 Land Use Planning
A-F only, 3 credit(s);
Instructor: Burkhart, Ann M
Description:

Law 6203 Labor Law
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6207 Antitrust I
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6213 Real Estate Transactions
Law 6215 Environmental Law
A-F only, 3 credit(s); 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 6224 Patents
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: LAW 5224;
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 6229 Criminal Process
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: Criminal Process examines a variety of procedures governing the prosecution of crime. It covers, in essence, criminal procedure from the time that the police have handed a case over to the lawyers. Major topics include: prosecutorial charging discretion, judicial screening, the grand jury, discovery, speedy trial, double jeopardy, plea bargaining, jury selection, jury deliberations, sentencing, appeals, and habeas. This class is sometimes known as ?Criminal Procedure II? because it picks up chronologically where Criminal Procedure ends. Criminal Procedure, however, it not a prerequisite.

Law 6231 Patent Prosecution Practice I
A-F only, 2 credit(s); Credit will not be granted if credit has been received for: LAW 5231;
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
A-F only, 2 credit(s);
Law 6250 Patent Portfolio Management
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: LAW 5250;
Instructor: Jonas, Victor Petersen
Description: Student may contact the instructor or department for information.

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 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 6610 Unfair Competition
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description:

Law 6618 Trial Practice
A-F only, 3 credit(s);
Instructor: STAFF
Description:

Law 6623 Integrative Leadership: From Theory to Practice
A-F only, 3 credit(s);
Instructor: Quast, Louis Neumann
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.
Law 6623 Integrative Leadership: From Theory to Practice
A-F only, 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%

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 6633 Public Health Law & Ethics: From Prevention & Emergencies to Bioterrorism
A-F only, 3 credit(s);

Instructor: Wolf,Susan M

Description: This 3-credit course is an intensive and interdisciplinary examination of a wide range of issues in public health law and ethics, including prevention strategies, emergency preparedness and response, and averting and coping with bioterrorism. Modern public health focuses on the health of populations. Efforts to cope with infectious disease, natural disasters, and even deliberately created health threats involve all levels of government, from local to national. Because infectious diseases such as HIV, SARS, and Ebola obey no national borders and massive disasters such as drought and tsunamis have global impact, public health law is increasingly international. The legal, ethical, and scientific issues are immense. When emergencies such as Hurricane Katrina or a highly pathogenic influenza epidemic strike, the legal, ethical, and public health issues posed are wide-ranging. Questions arise of suspending normal legal arrangements in favor of emergency powers and curtailing individual liberty. Movies such as ?Contagion? and nonfiction books such as Five Days at Memorial (Sheri Fink?s account of alleged mercy killings at a flooded hospital during Hurricane Katrina) vividly depict the human lives at stake and the profound challenge to the rule of law. Bioterrorism incidents, such as the anthrax letters mailed in 2011, raise further issues at the border of public health, national security, and law enforcement. Examining how law, ethics, and public health anticipate, handle, and resolve issues of prevention, emergencies, and bioterrorism forces us to take a deep look at constitutional, administrative, and international law; ethics and politics; and the science of public health, including risk analysis and epidemiology. Students will actively debate the issues posed by each week?s reading and will take a 3-hour open-book exam. Grading will be based on class participation and the exam.

Grading: 75% final exam, 25% class participation.

Exam Format: 3-hour open-book exam

Law 6644 Economic Analysis of Law
A-F only, 3 credit(s), max credits 6;

Instructor: STAFF

Description: http://www.law.umn.edu/current/courseguide.html

Law 6648 International Criminal Law
A-F only, 3 credit(s);

Instructor: Jain,Neha

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 6706 Punishing Corporations and Governments
A-F only, 3 credit(s);
Instructor: Jain, Neha
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 Cooperatives
A-F only, 2 credit(s);
Instructor: Boland, Michael Aloysius
Description:

Law 6807 Seminar: Law of Cooperatives
A-F only, 2 credit(s);
Instructor: Kopka, Christopher J
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: Cribari, Stephen Jon
Description:

Law 6830 Seminar: Corporate Counsel
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6831 Law, Race, and Social Psychology
A-F only, 3 credit(s);
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6834 Seminar: Habeas Corpus
A-F only, 2 credit(s);
Instructor: Thompson, Peter Jeffrey
Description: Student may contact the instructor or department for information.
Law 6837 Seminar: Contract Drafting
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 6870 Seminar: Negotiations
A-F only, 2 credit(s);
Instructor: STAFF
Description:

Law 6872 Immigration Law
A-F only, 3 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 Joint Degree Program in Law, Science & Technology Proseminar
S-N only, 0.5-1 credit(s), max credits 8, 8 completions 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 6885 Seminar: Current Issues in Environmental & Energy 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 6894 Seminar: Sentencing Guidelines
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: STAFF
Description: See http://www.law.umn.edu/current/courseguide.html

Law 6906 Seminar: Public Law Workshop
A-F only, 2 credit(s);
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 6918 Seminar: Rule of Law  
A-F only, 2 credit(s);  
Instructor: STAFF  
Description:

Law 6922 Sem: Business Law Concentration  
P-F only, 1 credit(s);  
Instructor: McDonnell, Brett H  
Description: Student may contact the instructor or department for information.

Law 6925 Patent Law Proseminar I  
A-F only, 1 credit(s); Credit will not be granted if credit has been received for: LAW 5025;  
Instructor: Frank, Christopher Gregory  
Description: Student may contact the instructor or department for information.

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 7004 Seminar: Structured Study Group Instructors  
S-N 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 7009 Cl: Insurance Law Directors  
A-F only, 2-6 credit(s), max credits 6, 1 completion allowed;  
Instructor: Brownell, Margo  
Description: Student may contact the instructor or department for information.

Law 7010 CL: Innocence  
A-F only, 2-3 credit(s), max credits 6;  
Instructor: STAFF  
Description:
Law 7012 CL: Environmental Sustainability-Land Use & Water Policy
   A-F only, 3-7 credit(s), max credits 7, 1 completion allowed;
   Instructor: Enzler, Sherry Anne
   Description:

Law 7013 CL: Environmental Sustainability Directors
   A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
   Instructor: Enzler, Sherry Anne
   Description: Student may contact the instructor or department for information.

Law 7015 CL: Worker Rights
   A-F only, 2-4 credit(s), max credits 8;
   Instructor: STAFF
   Description:

Law 7016 CL: Workers Rights Directors
   A-F only, 2 credit(s), max credits 4;
   Instructor: STAFF
   Description:

Law 7017 International Humphrey Fellow Student Instructor
   A-F only, 1 credit(s);
   Instructor: Rudelius-Palmer, Kristi Lynn
   Description: Student may contact the instructor or department for information.

Law 7025 ABA Moot Court Competition Team
   A-F only, 1-2 credit(s), max credits 3;
   Instructor: STAFF
   Description: Student may contact the instructor or department for information.

Law 7026 ABA Moot Court Competition Director
   A-F only, 1-2 credit(s), max credits 3;
   Instructor: STAFF
   Description: Student may contact the instructor or department for information.

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 7035 Environmental Law Moot Court
   A-F only, 1-2 credit(s), max credits 2;
   Instructor: STAFF
   Description: Student may contact the instructor or department for information.

Law 7036 Environmental Law Moot Court Director
   A-F only, 1-2 credit(s), max credits 2;
   Instructor: STAFF
   Description: Student may contact the instructor or department for information.

Law 7037 Environmental Law Moot Court Competition Team
   A-F only, 1-2 credit(s), max credits 2;
   Instructor: STAFF
   Description: Student may contact the instructor or department for information.
Law 7040 CL: Community Mediation
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Bulman, Karmit Julie
Description:

Law 7041 CL: Community Mediation Directors
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Bulman, Karmit Julie
Description: Student may contact the instructor or department for information.

Law 7042 CL: Federal Immigration Litigation
A-F only, 3-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Casper, Ben
Description:

Law 7042 CL: Federal Immigration Litigation
A-F only, 3-7 credit(s), max credits 7, 1 completion allowed;
Instructor: Evans, Katherine Loges
Description:

Law 7043 CL: Federal Immigration Litigation Director
A-F only, 3 credit(s), max credits 6;
Instructor: Casper, Ben
Description: Student may contact the instructor or department for information.

Law 7045 ABA Journal of Labor and Employment Law
S-N only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7046 ABA Journal of Labor and Employment Law Staff
S-N only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7055 Maynard Pirsig Moot Court
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description:

Law 7056 Maynard Pirsig Moot Court Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7057 Maynard Pirsig Moot Court Research Director
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7058 Maynard Pirsig Moot Court Managing Director
A-F only, 1 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7065 National Moot Court
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.
Law 7066 National Moot Court Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7067 National Moot Court Administrative Director
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7068 National Moot Court Competition Team
A-F only, 1 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

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 7076 International Moot Court Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7077 International Moot Court Administrative Director
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7085 Intellectual Property Moot Court
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7086 Intellectual Property Moot Court Competition Team
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7087 Intellectual Property Moot Court Director
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7092 CL: Bankruptcy Clinic
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description:

Law 7093 CL: Bankruptcy Clinic Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description:

Law 7094 Civil Rights Moot Court Administrative Director
A-F only, 1-2 credit(s), max credits 2;
Instructor: STAFF
Description: Student may contact the instructor or department for information.
Law 7095 Civil Rights Moot Court
A-F only, 1-2 credit(s), max credits 3;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7096 Civil Rights Moot Court Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7097 Civil Rights Moot Court Competition Team
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7098 CL: Indian Child Welfare Act
A-F only, 1-7 credit(s), max credits 14;
Instructor: STAFF
Description:

Law 7099 CL: Indian Child Welfare Clinic Director
A-F only, 1-4 credit(s), max credits 4;
Instructor: STAFF
Description:

Law 7100 Law Review Editors
S-N only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7102 Law Review Staff Member
S-N only, 1-2 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7200 Law and Inequality Journal Editor
S-N only, 1-6 credit(s), max credits 9, 4 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7201 Law and Inequality Journal Associate Editor
S-N only, 2 credit(s), max credits 4;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7202 Law and Inequality Journal Staff
S-N only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7300 Minnesota Journal of International Law Editor
S-N only, 1-6 credit(s), max credits 9, 4 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Law 7302 Minnesota Journal of International Law Staff
S-N only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Student may contact the instructor or department for information.
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 7401 CL: Human Rights Litigation and International Legal Advocacy Directors
  A-F only, 1-6 credit(s), max credits 12;
  Instructor: Green, Jennifer Mary
  Description: Student may contact the instructor or department for information.

Law 7501 CL: Criminal Justice Directors
  A-F only, 1-4 credit(s), max credits 4;
  Instructor: STAFF
  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: Fettig, Derik T
  Description: Student may contact the instructor or department for information.

Law 7600 Minnesota Journal of Law, Science, and Technology Editor
  S-N only, 1-6 credit(s), max credits 6, 4 completions allowed;
  Instructor: STAFF
  Description: Student may contact the instructor or department for information.

Law 7602 Minnesota Journal of Law, Science, and Technology Staff
  S-N only, 1-3 credit(s), max credits 6;
  Instructor: STAFF
  Description: Student may contact the instructor or department for information.

Law 7608 Independent Research
  A-F only, 1-18 credit(s), max credits 18, 4 completions allowed;
  Instructor: STAFF
  Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
  S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
  Instructor: Hopeman, Jon
  Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
  S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
  Instructor: Cox, Prentiss
  Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
  S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
  Instructor: Thomas, Laura M
  Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
  S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
  Instructor: Befort, Stephen Frank
  Description: Student may contact the instructor or department for information.
Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Cooper, Laura J
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: McDonnell, Brett H
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Okediji, Ruth L
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Hasday, Jill E
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Evans, Katherine Loges
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Cotter, Thomas Francis
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Klass, Alexandra B.
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Monahan, Amy
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Murray, JaneAnne
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Shen, Francis Xavier
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Fisher, David F
Description: Student may contact the instructor or department for information.

Law 7609 Independent Research--Field Placement Project
S-N only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Carbone, June Rose
Description: Student may contact the instructor or department for information.
Law 7675 CL: Child Advocacy
  A-F only, 1-7 credit(s), max credits 7;
  Instructor: STAFF
  Description: http://www.law.umn.edu/current/courseguide.html

Law 7676 CL: Child Advocacy Director
  A-F only, 1-4 credit(s), max credits 4;
  Instructor: STAFF
  Description:

Law 7750 CL: Community Practice and Policy Development
  A-F only, 1-4 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:

Law 7843 CL: Immigration Clinic Director
  A-F only, 1-4 credit(s), max credits 4;
  Instructor: STAFF
  Description:

Law 7844 CL: Detainee Rights
  A-F only, 3-4 credit(s), max credits 8;
  Instructor: Heesch,Meghan
  Description: Student may contact the instructor or department for information.

Law 7845 CL: Detainee Rights Clinic Director
  A-F only, 3 credit(s), max credits 9, 3 completions allowed;
  Instructor: Heesch,Meghan
  Description: Student may contact the instructor or department for information.

Law 7860 CL: Business Law
  A-F only, 2-4 credit(s), max credits 8;
  Instructor: STAFF
  Description:

Law 7950 CL: Tax Clinic
  A-F only, 2-4 credit(s), max credits 8;
  Instructor: STAFF
  Description:

Law 7951 CL: Tax Clinic Director
  A-F only, 1-4 credit(s), max credits 4;
  Instructor: STAFF
  Description:

Learning and Academic Skills

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: Sandidge, Rita Rena  
Description: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success  
2 credit(s);  
Instructor: Allen, Thomas Dawson  
Description: Student may contact the instructor or department for information.

LASk 1001 Mastering Skills for College Success  
2 credit(s);  
Instructor: Pulles, Sandra Moran  
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 1001 Mastering Skills for College Success  
2 credit(s);  
Instructor: Cook, Opal Maria  
Description: Student may contact the instructor or department for information.

LASk 1101 Academic Refresher  
S-N only, 1 credit(s);  
Instructor: Quanbeck, Jo  
Description: Student may contact the instructor or department for information.

LASk 1102 Academic Success  
S-N only, 2 credit(s), max credits 4;  
Instructor: Sandidge, Rita Rena  
Description: Student may contact the instructor or department for information.

LASk 1102 Academic Success  
S-N only, 2 credit(s), max credits 4;  
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: Cook, Opal Maria  
Description: Student may contact the instructor or department for information.

Liberal Studies  
20 Ruttan Hall

LS 5100 Liberal Studies Seminar  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Trow, Tom  
Description: Student may contact the instructor or department for information.

LS 5100 Liberal Studies Seminar  
A-F only, 2 credit(s), max credits 24, 24 completions allowed;  
Instructor: Ultan, Roslye B  
Description: Student may contact the instructor or department for information.

LS 5100 Liberal Studies Seminar  
A-F only, 2 credit(s), max credits 24, 24 completions allowed;  
Instructor: Andregg, Michael  
Description: Student may contact the instructor or department for information.
LS 5100 Liberal Studies Seminar  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Thayer, Tryggvi Brian  
Description: Student may contact the instructor or department for information.

LS 5100 Liberal Studies Seminar  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Crosby, Barbara C  
Description: Student may contact the instructor or department for information.

LS 5100 Liberal Studies Seminar  
A-F only, 2 credit(s), max credits 24, 24 completions allowed;  
Instructor: Daniel, Stephen Lewis  
Description: Student may contact the instructor or department for information.

LS 5100 Liberal Studies Seminar  
A-F only, 3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Harkins, Arthur 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. Key concepts/models from sociology, futures study, and business. Innovative, team leadership strategies. Definition/application of just-in-time concept. Life-long self-improvement skills.  
Style: Online  
Grading: See attached syllabus

LS 5950 Special Topics  
A-F only, 1 credit(s), max credits 12, 3 completions allowed;  
Instructor: Corley, Kathleen Hayes  
Description: Student may contact the instructor or department for information.

LS 5950 Special Topics  
A-F only, 1 credit(s), max credits 12, 3 completions allowed;  
Instructor: Iggers, Jeremy Franklin  
Description: Student may contact the instructor or department for information.

LS 5950 Special Topics  
A-F only, 1 credit(s), max credits 12, 3 completions allowed;  
Instructor: Marboe, John Charles  
Description: Student may contact the instructor or department for information.

LS 8001 Introduction to Interdisciplinary Inquiry  
A-F only, 3 credit(s);  
Instructor: Gustafson, Donna Mae J  
Description: Required introductory seminar for admitted MLS students. Emphasizes what individual students need to know or be able to do to successfully complete his or her individually crafted interdisciplinary program, including critical thinking, clear writing, and interdisciplinary research.

LS 8002 Final Project for Graduate Liberal Studies  
A-F only, 3 credit(s);  
Instructor: Knutson, April A  
Description: Student may contact the instructor or department for information.

Linguistics  
S205 Elliott Hall

Ling 1701 Language and Society  
4 credit(s); Meets CLE req of Diversity and Soc Justice US  
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 3001 Introduction to Linguistics**

4 credit(s); Credit will not be granted if credit has been received for: LING 3001H; Meets CLE req of Social Sciences

**Instructor:** STAFF

**Description:** This course is a general introduction to the various subfields of linguistics, the discipline devoted to the nature of human language, its basis in cognition, and its role in human affairs. The main emphasis in the course will be on the structural components of language: syntax (phrase and sentence structure), morphology (word structure), phonology (sound structure), and semantics/pragmatics (meaning). Students will learn about how human languages can differ from one another and how they are alike; they will also learn basic techniques for describing and analyzing linguistic data through working on examples taken from various languages of the world. An understanding of structural components of language will also serve as the basis for an introduction to subfields of linguistics concerned with how languages change over time (historical linguistics, the nature and cause of regional and social variation and diversity within a given language (sociolinguistics), how languages are learned by children and by adults learning a second language (language acquisition), and the biological basis of language in the brain (neurolinguistics). The course will be conducted through lectures and discussions. Course requirements include regular assignments, a midterm and a final. Target audience is anyone with an interest in the nature of human language.

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

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

**Exam Format:** Short answer

**Ling 3051H Honors: Thesis**

A-F only, 3 credit(s);

**Instructor:** STAFF

**Description:** Independent research and writing of honors BA thesis, under the guidance of a faculty member selected according to student's topic. Details of work are determined in consultation with faculty advisor. Target audience: Linguistics majors in CLA Honors Program

**Style:** independent research, writing

**Grading:** 100% other evaluation. Research progress as determined by faculty advisor

**Ling 3052V Honors: Thesis**

A-F only, 3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** A continuation of Ling 3051H, with emphasis on writing final version of thesis. Audience: CLA Honors Linguistics majors.

**Style:** independent research, writing

**Grading:** 100% reports/papers.

**Exam Format:** multiple choice, fill-in, matching, short answer

**Ling 3101W Languages of the World**

3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** STAFF

**Description:** In this course we will survey several methods used in the classification of languages, examining genetic and typological classifications in greater depth. We will explore what each reveals about the relationships and range of variation found in the world's languages. The second half of the semester will survey representative languages and language families throughout the world, examining sample languages in greater depth for where they fit into the classification systems examined earlier. In each region studied, specific linguistic phenomena which are particularly well-developed in that region will be examined and compared, as appropriate, to related structures in languages known to class members. Students will investigate a language of their choice in some depth and present their findings in a final course project.

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

**Grading:** 20% final exam, 30% reports/papers, 20% quizzes, 10% class participation, 20% problem solving.

**Exam Format:** multiple choice, fill-in, matching, short answer

**Ling 4002 Linguistic Analysis**

3 credit(s);

**Instructor:** Marcotte, Jean-Philippe

**Description:** This post-introductory course has three goals: improving problem-solving techniques for morphological, phonological, and syntactic analysis; learning to present detailed, complete solutions to analysis problems using the descriptive and explanatory concepts of generative linguistics; exposing students to a range of different grammatical phenomena from a range of different languages.

**Style:** 25% Lecture, 75% Small Group Activities.

**Grading:** 33% final exam, 67% written homework.
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 5201 Syntactic Theory I
3 credit(s); 3001 or 3001H or 5001 or instr consent
Credit will not be granted if credit has been received for: LING 4201;
Instructor: Soh, Hooi Ling
Description: This course is an introduction to syntax: the study of how words are organized into phrases and sentences. The objective is to introduce students to basic concepts and issues in current syntactic theory within the Principles and Parameters approach. We will focus on our knowledge of the structure of phrases and sentences, how such knowledge is represented, and what it reveals about the nature of human language. The course will be conducted through lectures and discussions. Course requirements include regular problem sets, a paper proposal, a final course paper and an in-class presentation of the paper. Target audience is graduate students in linguistics and related disciplines as well as undergraduate Honors students.
Style: 75% Lecture, 25% Discussion.
Grading: 30% mid exam, 40% final exam, 30% problem solving.
Exam Format: short answer

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
Ling 5900 Topics in Linguistics: Japanese Language and Food

Topics to be covered include defining gender, bases for gender classification (semantic, structural), gender in diachronic and psycholinguistic perspective, gender agreement and gender resolution.

Grading: The grade will be based on a paper (15-20 pp., double-spaced).

Ling 5900 Topics in Linguistics: Gender in Linguistic Structure

Instructor: Kac, Michael B

Description: Topics to be covered include defining gender, bases for gender classification (semantic, structural), gender in diachronic and psycholinguistic perspective, gender agreement and gender resolution.

Grading: The grade will be based on a paper (15-20 pp., double-spaced).

Ling 5900 Topics in Linguistics: Japanese Language and Food

Instructor: Szatrowski, Polly Ellen

Description: LING5900 (LEC001) Topics in Linguistics: Japanese Language and Food (Polly Szatrowski) In 2013, washoku ‘traditional Japanese cuisine’ was honored by UNESCO as an Intangible Cultural Heritage. 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: 30% Lecture, 40% Discussion, 30% Student Presentation. 

Grading: 40% class participation. Major paper, abstract, presentation: 30%; Written homework and data collection: 30%

Ling 5900 Topics in Linguistics: Storytelling in Conversation 
3 credit(s), max credits 12, 3 completions allowed; 
Instructor: Sheldon PhD,Amy 
Description: This is a hands-on workshop to study the intersection of linguistic, pragmatic, imagistic, and sociolinguistic/interactional features of stories that emerge in everyday spontaneous conversations. Spoken discourse treated as the co-expression of verbal and imagistic embodied meaning. Topics include constructed dialogue, repetition, evaluation, moral stance, discourse markers e.g., 'like', and how the body co-expresses meaning via gesture, gaze, and other body engagement. Format: Instruction in the use of free UMN digital video equipment will be given in Week 1. Each student will record themselves and one or two friends in a spontaneous everyday conversation. No prior video recording or tech experience necessary. Tech support available. Throughout the semester students will apply readings to analysis of their data and instructor-provided data. Development of skills in discourse analysis, data transcription, annotation, analysis, oral presentation, and write-up. Course taught in a tech enhanced STSS classroom. Readings include Labov, Ochs, Schegloff, Jefferson, C. Goodwin, Pomerantz, Thompson, Stievers, Sidnell, Bucholtz, Bamberg, Georgakopoulou, McNeill, Streeck et al. Graduate students can explore a topic of interest. Prerequisite: Introduction to Linguistics, or equivalent, or permission of instructor.

Ling 5993 Directed Study 
1-3 credit(s), max credits 10, 10 completions allowed; 
Instructor: Reece,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 8900 Seminar: Topics in Linguistics: Gender in Linguistic Structure
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Kac,Michael B
Description: Student may contact the instructor or department for information.

Ling 8920 Topics in Language and Cognition
3 credit(s), max credits 6;
Instructor: Gundel, Jeanette K
Description: Student may contact the instructor or department for information.

Ling 8991 Independent Study
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Reese, Brian Jon
Description: Student may contact the instructor or department for information.

Ling 8991 Independent Study
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: Gundel, Jeanette K
Description: Student may contact the instructor or department for information.

Ling 8991 Independent Study
1-4 credit(s), max credits 15, 15 completions allowed;
Instructor: 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: Lafferty, Kathleen Anne
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: Stafford, Benjamin Arthur
Description: Student may contact the instructor or department for information.
Mgmt 1001 Contemporary Management
A-F only, 3 credit(s);
Instructor: Zhou, Le
Description: Student may contact the instructor or department for information.

Mgmt 1001H Honors: Contemporary Management
A-F only, 3 credit(s);
Instructor: Li, Min
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: Westall, Sarah Katherine
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: Nary, Paul
Description: Student may contact the instructor or department for information.

Mgmt 3001 Fundamentals of Management
A-F only, 3 credit(s);
Instructor: Say, Gui Deng
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
Mgmt 3010 Introduction to Entrepreneurship
A-F only, 4 credit(s);
Instructor: Spruth, Steve
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 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, communication, innovation processes, sales, negotiations, recruitment and staffing, and leadership.
Style: 25% Lecture, 20% Discussion, 20% Small Group Activities, 20% Student Presentation, 15% Guest Speakers.
Grading: 25% reports/papers, 60% special projects, 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: STAFF
Description: Students 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 3033VCredit 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.

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**Mgmt 3040 Understanding the International Environment of Firms: International Business**

A-F only, 2 credit(s);

**Instructor:** Singh, Gurneeta Vasudeva

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

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**Mgmt 3603 Topics: Environmental Issues**

A-F only, 3 credit(s); [MATH 1142 or [MATH 1271, MATH 1272]], [APEC 1101 or ECON 1101 or 3261W] Credit will not be granted if credit has been received for: ESPM 3603;

**Instructor:** Hill, Jason David

**Description:** Life cycle assessment (LCA) is a tool used in understanding the cradle-to-grave environmental impacts of products, processes, and policies. Students will learn LCA methodology, including goal and scope definition, inventory analysis, impact assessment, interpretation, and application. The course will be taught using numerous case studies. Students will have the opportunity to apply the LCA methodology they learn in lectures, discussions, and other in-class activities to the preparation of a group project on a topic of their choosing.

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**Mgmt 3604 Topics: Environmental Issues**

A-F only, 3 credit(s);

**Instructor:** Smith, Tim

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

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**Mgmt 4002 Managerial Psychology**

A-F only, 4 credit(s);

**Instructor:** Albert, Stuart

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

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**Mgmt 4008 Entrepreneurial Management**

A-F only, 4 credit(s);

**Instructor:** Pavone, Carla

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

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**Mgmt 4050 Management of Innovation and Change**

A-F only, 2 credit(s); 1001, [3001 or 3010] credit will not be granted if credit received for: 5050 Credit will not be granted if credit has been received for: IBUS 4050;

**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.

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

Mgmt 6034 Strategic Leadership  
A-F only, 2 credit(s);  
Instructor: Cohen, Anne Noelle  
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 Teams  
A-F only, 2 credit(s); MBA student Credit will not be granted if credit has been received for: HRIR 6484;  
Instructor: Madzar, Svjetlana  
Description: Student may contact the instructor or department for information.

Mgmt 6084 Management of Teams  
A-F only, 2 credit(s); MBA student Credit will not be granted if credit has been received for: HRIR 6484;  
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: Kaul, Aseem  
Description: This course examines issues of corporate strategy, including the choice of business portfolio and the various means available to a firm to grow or renew its scope. The first half of the course explores the sources of value from operating in multiple businesses, including the advantages and disadvantages of vertical integration, the costs and benefits of horizontal diversification and the challenges of managing a diversified firm. The second half of the course focuses on the
means that firms use to grow or renew their business portfolio, studying the benefits and challenges associated with alliances, acquisitions and divestitures.

Mgmt 6100 Topics in Management: STARTUP: Customer Development and Testing
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: Le, Thanh Trung
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 student Credit will not be granted if credit has been received for: PA 5105;
Instructor: Quast, Louis Neumann
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%

Mgmt 6402 Integrative Leadership: From Theory to Practice
A-F only, 3 credit(s); MBA student Credit 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.
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%

Mgmt 6410 Corporate Responsibility
A-F only, 2 credit(s);
Instructor: Shaver, Myles
Description: Student may contact the instructor or department for information.
Management of Technology  290 McNamara Center

MOT 4001 Leadership, Professionalism and Business Basics for Engineers
A-F only, 2 credit(s);
Instructor: Froggatt,Kirk
Description: MOT 4001 is designed to provide scientists and engineers with a working knowledge of the broader business context within which technical ideas are translated into solutions that address customer needs and deliver commercial value to a firm. The course will broaden students' business knowledge and personal leadership abilities, enabling technical professionals to increase their business impact and career success. This two-credit course will build practical knowledge and skill in personal leadership and professionalism, effective communication, business fundamentals, and the process of innovation (i.e., transforming technical ideas into value creating solutions). The course content and the experiential learning approach are designed to reflect the real world requirements and challenges technical professionals need to master in order to thrive in collaborative, project team environments. The course instructor has spent 25 years working for global technology companies including HP, Silicon Graphics, Yahoo!, Agilent Technologies, and Ecolab. He brings relevant experience, academic rigor, and a passion for applied learning and development to the classroom.
Style: 40% Lecture, 30% Discussion, 30% Small Group Activities.
Grading: 20% mid exam, 30% final exam, 35% reports/papers, 15% class participation.

MOT 5001 Technological Business Fundamentals
A-F only, 2 credit(s);
Instructor: Webster,Steve
Description: Student may contact the instructor or department for information.

MOT 8114 Strategic Technology Analysis
A-F only, 2 credit(s);
Instructor: Carlson,Lockwood
Description: Student may contact the instructor or department for information.

MOT 8121 Managing Organizations in a Technological Environment
A-F only, 2 credit(s);
Instructor: Soni,Tarun
Description: Student may contact the instructor or department for information.

MOT 8133 Communication in a Technical Environment
A-F only, 2 credit(s);
Instructor: Wilbers,Stephen
Description: Student may contact the instructor or department for information.

MOT 8212 Developing New Technology Products
A-F only, 2 credit(s);
Instructor: Carlson,Lockwood
Description: Student may contact the instructor or department for information.

MOT 8221 Project and Knowledge Management
A-F only, 1.5 credit(s), max credits 2, 1 completion allowed;
Instructor: Smith,Karl Aldrich
Description: Student may contact the instructor or department for information.

MOT 8224 Pivotal Technologies
A-F only, 2 credit(s);
Instructor: Amin,Massoud
Description: Student may contact the instructor or department for information.

MOT 8233 Strategic Management of Technology
A-F only, 2 credit(s);
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: jmbork@csom.umn.edu or borkx007@umn.edu Phone: 763-656-3527
Required Presentation Zen, Simple ideas on Presentation Design and Delivery Author: Reynolds, Garr; Edition: ; ISBN: 978-0-321-52565-9 Bring a One Gig or higher flashdrive to each class (We do this so your powerpoint can be loaded on the computer as quickly as possible) Guide to Presentations Author: Munter, Mary; Edition: ; ISBN: 0131755234 Publisher: Prentice Hall PTR GUIDE TO MANAGERIAL COMMUNICATION Author: MUNTER, Mary; Edition: ; ISBN: 9780131467040 Publisher: PEARSON ED The Course: Quite often workplace communication involves memos, directives, policy statements, email notes, website development, and company gatherings. All of these usually are formal and scripted. We will analyze those formal communications, but we will also try to dissect how the audience processes your message, perceives those messages, and then acts upon the information. I have tried to create this learning experience to be one that involves raising your competency in the areas of memo writing, generating oral and written presentations, and management of the infamous "grapevine." The central purpose of this course is to understand the principles of formal and informal communication from both the receiver and the sender within the organization: 1. To learn how to create a formal message to the organization (within an HR environment). 2. To assess how the message will be interpreted (internal and external stakeholders). 3. To identify how many different types of communication vehicles can be used to permeate the organization. 4. To discover and develop how good communication inside and outside of the company can be used as a catalyst towards higher levels of profitability in the organization. 5. To create a system of good communication within the company. Here are some study topics that should be reviewed before taking this course: 1. The communication process. 2. The role of Human Resources within the organization. 3. Organizational behavior. 4. External and Internal stakeholders. Course Requirements: Your Introduction to the class: Within the required textbooks by Garr Reynolds and Dr. Mary Munter several themes resound in each chapter. To be an effective communicator and competent HR professional you are required to lead meetings, act as an advocate for employees in group activities, deliver bad news, and sell ideas to peers and upper management. See the email sent to you prior to class. Project:
Style: 10% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 40% Student Presentation, 20% Demonstration.
Grading: 20% quizzes, 80% in-class presentation. You will be required to develop a written strategic plan that chronicles a
major shift in business practices within the organization and orchestrate a presentation regarding implementation to senior management. The effects of the change will require

Exam Format: Quizzes and exams will be short textbook answer with an awesome example attached.

MCom 5500 Enhancing Your Executive Image in Business Communications
A-F only, 2 credit(s), max credits 4;
Instructor: Syverson MA, JoAnn
Description: Student may contact the instructor or department for information.

Manufacturing Operations Management 20 Ruttan Hall

MM 3001 Manufacturing in a Global Economy
A-F only, 3 credit(s);
Instructor: King, William Tyler
Description: This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. Visit "Class URL" for ODL policy, fee, and financial aid information. In today's changing global economy, high-performing manufacturing operations must function at the intersection of three important dimensions: Leadership, product quality, and Innovation. This course breaks down each dimension in detail and explains how all three are interrelated and necessary to achieve sustainable profitability.
Style: Online
Grading: See attached syllabus

MM 3205 Engineering for Manufacturing Operations
A-F only, 3 credit(s);
Instructor: Schiveley, Steve
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. <a href="https://docs.google.com/a/umn.edu/document/d/17kBs4iihEa3dl_djXBD5cTECOsWOUiZZfDD1rvbDaUI/edit">Course Syllabus</a></p>

MM 3305 3D Printing and Additive Manufacturing
A-F only, 3 credit(s);
Instructor: Carlson, Andrew James
Description: 3D printing is disruptive technology that will have a profound impact on America's manufacturing in the 21st century. This course provides an overview of 3D printing technology and how to set up and run an innovative manufacturing program using additive manufacturing rather than traditional subtractive manufacturing. Students will learn about the different types of additive manufacturing (3D printing), the full process of taking an idea to reality (from CAD models to real parts), the growing number of applications (aerospace, automotive, consumer products, etc.), and how to set up and run a lab (operations, challenges, goals). Students will also gain hands-on experience with 3D printers, printing, and modeling, and will have an opportunity to explore the possibilities of the technology firsthand. The course is offered in a blended format, with some meetings in a classroom or lab and the rest online in Moodle. <iframe width="560" height="315" src="https://www.youtube.com/embed/uuh8uTod-QA?rel=0" frameborder="0" allowfullscreen"></iframe>

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:** See attached syllabus

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**MM 4201 Quality Engineering and Process Improvement**

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

**Instructor:** Nied, Paul Joseph

**Description:** Principles and historical foundations of total quality, best practices of high-performing quality organizations, role of leadership and strategic planning, statistical process control, control charts, ISO 9001 standards, lean, and Six Sigma, as well as a range of other quality management topics that are applicable to a career as a quality leader or quality engineer in the field of manufacturing. [NOTE: This course is similar to ABus 3301, Introduction to Quality Management, which covers principles and concepts of managing quality in the context of a broad range of business applications, with major focus on Six Sigma process improvement methodology and its application to real-world scenarios. Looks at ISO 9001, process control, and performance measurement systems. Explores change management, quantifying opportunities, and cost benefit analysis, all of which are applicable to an array of employment sectors such as service, nonprofit, and government. Despite their different emphases, there will be some duplication in content between these two courses, so consider your interests and career direction carefully and then choose one or the other.]

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**MM 4596 Internship**

**A-F only, 1-4 credit(s), max credits 12, 3 completions allowed;**

**Instructor:** Nied, Paul Joseph

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

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**Marketing 3-150 Carlson School of Management**

**Mktg 3001 Principles of Marketing**

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

**Instructor:** Upton, Kevin John

**Description:**

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**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

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**Mktg 3001 Principles of Marketing**

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

**Instructor:** Jordan, Michael Stephen

**Description:**

**Style:** 20% Lecture, 30% Discussion, 25% Small Group Activities, 25% Web Based.

**Grading:** 5% special projects, 70% quizzes, 15% written homework, 10% class participation.

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

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**Mktg 3001 Principles of Marketing**

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

**Instructor:** Mittal, Chiraag

**Description:** Student may contact the instructor or department for information.
**Mktg 3001 Principles of Marketing**
A-F only, 3 credit(s);
Instructor: Stoner, Jennifer Lynne
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: Xu, Linli
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: Meyers-Levy, Joan
Description: Student may contact the instructor or department for information.

**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: Lipe, Jay
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: John, Deborah Roedder
Description: Student may contact the instructor or department for information.

**Mktg 6051 Marketing Research**
A-F only, 4 credit(s);
Instructor: Li, Xiaolin
Description: Student may contact the instructor or department for information.
Mktg 6055 Buyer Behavior
A-F only, 4 credit(s);
Instructor: Van Etten, Julia A.
Description: Student may contact the instructor or department for information.

Mktg 6072 International Marketing
A-F only, 4 credit(s);
Instructor: Lipe, Jay
Description: Student may contact the instructor or department for information.

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

Mktg 8810 Consumer Behavior Special Topics
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Vohs, Kathleen Diane
Description: Student may contact the instructor or department for information.

Mktg 8810 Consumer Behavior Special Topics
A-F only, 2 credit(s), max credits 8, 4 completions allowed;
Instructor: Griskevicius, Vladas
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,Aiyesha
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: Zellmer-Bruhn,Mary Elizabeth
Description: Student may contact the instructor or department for information.

MBA 6120 Data Analysis and Statistics for Managers
A-F only, 3 credit(s);
Instructor: Li,William
Description: Student may contact the instructor or department for information.

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: Werner,Seth E
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: Linderman,Kevin Wayne
Description: Student may contact the instructor or department for information.

MBA 6220 Operations Management
A-F only, 3 credit(s);
Instructor: Martens,Scott L
Description: Student may contact the instructor or department for information.
MBA 6220 Operations Management
A-F only, 3 credit(s);
Instructor: Shah, Rachna
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: Kaufmann, Jeffrey Baer
Description: Student may contact the instructor or department for information.

MBA 6315 The Ethical Environment of Business
A-F only, 2 credit(s);
Instructor: Marcus, Alfred A
Description: Student may contact the instructor or department for information.

MBA 6501 Carlson Funds Enterprise: Growth
2-4 credit(s), max credits 12, 3 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

MBA 6502 Carlson Funds Enterprise: Fixed Income
2-4 credit(s), max credits 12, 3 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

MBA 6503 Carlson Ventures Enterprise
OPT No Aud, 2-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Nord, Tobin Lawrence
Description: Student may contact the instructor or department for information.

MBA 6504 Carlson Consulting Enterprise
OPT No Aud, 2-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Gisser, Sarah Smith
Description: Student may contact the instructor or department for information.

MBA 6505 Carlson Brand Enterprise
OPT No Aud, 2-4 credit(s), max credits 12, 3 completions allowed;
Instructor: Hopkins, David K
Description: Student may contact the instructor or department for information.

Master of Business Taxation 3-110 Carlson School of Management

MBT 5200 Tax Accounting Methods and Periods
A-F only, 4 credit(s);
Instructor: STAFF
Description: This course covers rules affecting timing of income and deductions for tax purposes. Topics include cash and accrual accounting methods overall and with respect to individual items of income and deductions, and rules for changing accounting methods and changing accounting periods.
MBT 5220 Tax Research, Communication, and Practice  
A-F only, 4 credit(s);  
Instructor: 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);  
Instructor: Conlon, Roger John  
Description: Student may contact the instructor or department for information.

MBT 5346 ASC 740 Computations and Analysis  
A-F only, 2 credit(s);  
Instructor: Frank, Nicholas  
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.

**Masters of Business Analytics**

MSBA 6320 Data Management, Databases, and Data Warehousing
A-F only, 3 credit(s);
Instructor: Liu, De
Description: Student may contact the instructor or department for information.

MSBA 6330 Harvesting Big Data
A-F only, 3 credit(s);
Instructor: Liu, De
Description: Student may contact the instructor or department for information.

MSBA 6340 Project Management, Leadership, Communications and Team Dynamics
A-F only, 3 credit(s);
Instructor: Fiedler, Corrinne (Corrie)
Description: Student may contact the instructor or department for information.

MSBA 6410 Exploratory Data Analytics and Visualization
A-F only, 3 credit(s);
Instructor: Adomavicius, Gediminas
Description: Student may contact the instructor or department for information.

MSBA 6420 Predictive Analytics
A-F only, 3 credit(s);
Instructor: Adomavicius, Gediminas
Description: Student may contact the instructor or department for information.

**Materials Science  151 Amundson Hall**

MatS 1001 Advances in Chemical Engineering and Materials Science
S-N only, 1 credit(s); credit will not be granted if credit received for: ChEn 1001; Recommended for [chemical engineering, materials science/engineering] majors; Credit will not be granted if credit has been received for: CHEN 1001;
Instructor: Hu, Wei-Shou
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
Description: Student may contact the instructor or department for information.

MatS 2002 Introduction to the Science of Engineering Materials Laboratory
A-F only, 1 credit(s);
Instructor: Schott, Jeffrey H.
Description: Student may contact the instructor or department for information.

MatS 3001 Thermodynamics of Materials
A-F only, 3 credit(s);
Instructor: Wentzcovitch, Renata M
Description: Student may contact the instructor or department for information.

MatS 3011 Introduction to Materials Science and Engineering
3 credit(s);
Instructor: Flannigan, David James
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 credit(s), max credits 2;  
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: Manno, Michael A  
Description: Student may contact the instructor or department for information.

MatS 4041 Industrial Assignment II  
A-F only, 2 credit(s); 3041, 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 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: ESCI/MATS 5353 aims to familiarize students with the physics behind and instrumentation of electron microprobe analysis. Topics include beam generation, electron lenses, specimen preparation, electron-specimen interactions, X-ray generation, energy-dispersive and wavelength-dispersive spectrometry, matrix correction methods, and other relevant topics. Students will get hands-on experience on the department's JEOL JXA-8900R Electron Probe Microanalyzer and gain enough practice for routine imaging and chemical analysis during the lab portion of the class.
Grading: 20% mid exam, 25% final exam, 20% quizzes, 10% written homework, 5% attendance, 20% laboratory evaluation.
Exam Format: Exams and quizzes will be composed of essay and short-answer questions, label illustrations and charts, and use problem-solving and critical-thinking skills.

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 8555 MatS Teaching Practicum
S-N only, 1-6 credit(s), max credits 24, 4 completions allowed;
Instructor: Holmes, Russell James
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: Knoche, Randolph Lee Granheim
Description: Student may contact the instructor or department for information.

Math 1031 College Algebra and Probability
3 credit(s); 3 yrs high school math or satisfactory score on placement exam or grade of at least C- in [PSTL 731 or PSTL 732]; Credit will not be granted if credit has been received for: MATH 1051; Meets CLE req of Mathematical Thinking
Instructor: STAFF
Description: Overview: Linear and quadratic equations and inequalities; graphs of equations, including lines, circles, parabolas, composition, inverses of functions; transformations of graphs; linear, quadratic models; polynomials; exponentials; logarithms; counting; probability. Audience: Business majors wanting to take Math 1142 and elementary education majors wanting to take Math 3113. Also works as prerequisite for Math 1151. Satisfies the CLE Mathematical Thinking requirement.

Math 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: MATH 1031; Meets CLE req of Mathematical Thinking
Instructor: Robertson, Douglas Frederick
Description: This course assumes that students have a good working knowledge of high school algebra, at least through Algebra II even though the course begins with a very brief review of high school algebra. Students needing a more extensive review should register for 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: 60% mid exam, 30% final exam, 10% written homework.
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: 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 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: MATH 1031; Meets CLE req of Mathematical Thinking
Instructor: Hank, Robert Gerard
Description: Student may contact the instructor or department for information.

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: STAFF
Description: Overview: A one-semester tour of differential and integral calculus in one variable, and differential calculus in two variables. Does not involve any trigonometry. Emphasis on formulas and their interpretation and use in applications. Audience: Business, architecture, and agricultural science majors, and students who want some exposure to calculus. Does not serve as a prerequisite to any higher math course, but does satisfy the CLE Mathematical Thinking requirement.

Math 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: Math1155 Credit will not be granted if credit has been received for: MATH 1155; Meets CLE req of Mathematical Thinking
Instructor: Kinney, Pat
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. Satisifies 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: Math1155 Credit 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

Math 1155 Intensive Precalculus
5 credit(s); 3 yrs high school math or satisfactory score on placement exam or grade of at least C- in [PSTL 731 or PSTL 732] Credit will not be granted if credit has been received for: Math 1031, 1051, 1151 Credit will not be granted if credit has been received for: MATH 1151; Meets CLE req of Mathematical Thinking
Instructor: Corbett, John
Description: Student may contact the instructor or department for information.

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.

Math 1161 Statistics and Discrete Mathematics
A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Ballam, Christian Gary
Description: Student may contact the instructor or department for information.

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.

Math 1171 Calculus, Modeling, and Data I
A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Walia, Rajeev
**Math 1171 Calculus, Modeling, and Data I**

A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking

**Instructor:** Dame, Lorraine Frances

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

**Math 1241 Calculus and Dynamical Systems in Biology**

4 credit(s); Meets CLE req of Mathematical Thinking

**Instructor:** Nykamp, Duane Q

**Description:** An introduction to calculus where the concepts of calculus and related mathematics are introduced through modeling the dynamical behaviors of processes and systems in biology. Mathematical rules capturing the dynamics of living systems provide the basis for introducing elements of calculus. One goal is to elucidate both how mathematics can lead to a deeper understanding of biological systems and how biology can unlock some of the mystery of calculus, dynamical systems, and other areas of mathematics. Compared to a traditional calculus course, Math 1241 will focus less on specific computational techniques and more on the concepts underlying the mathematical tools and their application.

**Math 1271 Calculus I**

4 credit(s); 4 yrs high school math including trig or satisfactory score on placement test or grade of at least C- in [1151 or 1155]

Credit will not be granted if credit has been received for: MATH 1371; Meets CLE req of Mathematical Thinking

**Instructor:** STAFF

**Description:** Overview: Tangent lines; limits and continuity; differentiation: definition, basic rules, chain rule, rules for trig, exp and log functions; implicit differentiation; rates of change, max-min, related rates problems; 2nd derivative test; curve sketching; linear approximation and differentials; L'Hospital's rule; integration: definition, antidifferentiation, area; simple substitution; volumes of solids by cross sections and shells; work; average value of a function. Audience: The beginning of the standard course for students outside of IT. Also taken by IT students who need to start calculus in the middle of year. Students desiring only one semester of calculus should take Math 1142.

**Math 1271 Calculus I**

4 credit(s); 4 yrs high school math including trig or satisfactory score on placement test or grade of at least C- in [1151 or 1155]

Credit will not be granted if credit has been received for: MATH 1371; Meets CLE req of Mathematical Thinking

**Instructor:** Nash, Jennie Elizabeth

**Description:** This is a 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 study techniques of integration and more applications of integrations. In addition, you will explore the parametric equations of curves and use

**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:** STAFF

**Description:** Overview: Techniques of integration, including integration by parts, simple trig substitutions, partial fractions. Basic numerical integration; improper integrals; arc length; area of surface of revolution. Separable differential equations, Euler's method, exponential growth and decay. Parametric curves and polar coordinates. Review of conic sections. Sequences and series, comparison and ratio tests, Taylor series and polynomials. Vectors in three dimensions, dot product, cross product, lines, planes, cylinders, quadric surfaces; cylindrical and spherical coordinates. Audience: Part of the standard calculus course for students outside of IT.

**Math 1272 Calculus II**

4 credit(s); [1271 or equiv] with grade of at least C-Credit will not be granted if credit has been received for: MATH 1372;

**Instructor:** Hewitt, Harlan A

**Description:** This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course you will study techniques of integration and more applications of integrations. 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

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**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.

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**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: Morawski, David

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

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**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: Whitehead, Ian Michael

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

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**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.

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**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: O’Hara, Eoin Joseph

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

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**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.

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**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: Bashkirov, Denis

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

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**Math 2161 Bioinformatics and Biostatistics**

A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking

Instructor: Metzger, Kelsey Jean

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

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**Math 2161 Bioinformatics and Biostatistics**
A-F only, 3 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Dame, Lorraine Frances
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
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. In this course you will study the concepts of multivariable calculus, an extension of differential and integral calculus. You will start by examining partial derivatives and their application to maxima, minima, rate problems, and approximations. Then you will study double and triple integrals and their applications to volume and mass. The last major topic you will study is vector analysis and its application to the work done by a force, flux, and other physical quantities.
Style: This is a printed correspondence section.
Grading: 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 Engr
Credit 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 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-Bioprod/Biosys Engr
Credit will not be granted if credit has been received for: MATH 2263;
Instructor: Diaconu,Adrian
Description: Student may contact the instructor or department for information.

Math 2573H Honors Calculus III
A-F only, 4 credit(s); Math 1572H or Math 2574H, honors student and permission of University Honors Program
Credit will not be granted if credit has been received for: MATH 2263;
Instructor: Prikry,Karel L
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: Sperber,Steven I.
Description: Student may contact the instructor or department for information.

Math 3592H Honors Mathematics I
A-F only, 5 credit(s);
Instructor: Keel,Markus
Description: Student may contact the instructor or department for information.

Math 4065 Theory of Interest
A-F only, 4 credit(s);
Instructor: Schwartzbauer,Thomas
Description: Student may contact the instructor or department for information.

Math 4065 Theory of Interest
A-F only, 4 credit(s);
Instructor: Richins,Breanne Larsen
Description: Student may contact the instructor or department for information.

Math 4065 Theory of Interest
A-F only, 4 credit(s);
Instructor: Kemajou-Brown PhD,Isabelle
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;
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 continues from previous page)

(Math 4242 Applied Linear Algebra continues from previous page)

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(Math 4242 Applied Linear Algebra continues from previous page)

Math 4281 Introduction to Modern Algebra
4 credit(s);
Instructor: Sperber, Steven I.
Description: Student may contact the instructor or department for information.

Math 4281 Introduction to Modern Algebra
4 credit(s);
Instructor: Pawlowski, Brendan Alexander
Description: Student may contact the instructor or department for information.

Math 4512 Differential Equations with Applications
3 credit(s);
Instructor: Cockburn, Bernardo
Description: Student may contact the instructor or department for information.

Math 4567 Applied Fourier Analysis
4 credit(s);
Instructor: Li PhD, Tian-Jun
Description: Student may contact the instructor or department for information.

Math 4603 Advanced Calculus I
4 credit(s);
Instructor: Adams, Scot Robert
Description: Student may contact the instructor or department for information.

Math 4653 Elementary Probability
Math 4707 Introduction to Combinatorics and Graph Theory
4 credit(s);
Instructor: Lewis, Joel Brewster
Description: Introduction to enumerative combinatorics and graph theory. Topics include: existence, enumeration (exact and approximate), pigeonhole principle, bijective combinatorics, inclusion-exclusion, recursions, graph modeling, isomorphism, degree sequences and edge counting, connectivity, Eulerian graphs, trees, Euler's formula, network flows, matching theory. Goals also include gaining comfort with mathematical proof techniques.

Math 4991 Independent Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Spirn, Daniel
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 4991 Independent Study
1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Westerland, Craig Christopher
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Cockburn, Bernardo
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: Bobkov, Sergey G
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Berkesch Zamaere, Christine
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Spirn, Daniel
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Mosher, Bryan
Description: Student may contact the instructor or department for information.

Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Tzeng, Yu-jong
Math 4995 Senior Project for CLA
A-F only, 1 credit(s);
Instructor: Pawlowski, Brendan Alexander
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: 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: Olver, Peter J.
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: 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: Fristedt, Bert
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Gray, Lawrence F
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2; Meets CLE req of Writing Intensive
Instructor: Jiang, Dihua
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: Calderer,Carme
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: Scheel,Arnd
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Li PhD,Tian-Jun
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: Berkesch Zamaere,Christine
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: Spirn,Daniel
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: Lerman,Gilad
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: Yang,Yuhong
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: Vescelius,Doreen Karol
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Ashkenazi,Rina
Description: Student may contact the instructor or department for information.

Math 4997W Senior project (Writing Intensive)
A-F only, 1 credit(s), max credits 2;Meets CLE req of Writing Intensive
Instructor: Bilyk,Dmytro
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: Brubaker, Benjamin
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: Glick, Max
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: Zhu, Lingjiong
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: Yang, Tzu-Wei
Description: Student may contact the instructor or department for information.

Math 5075 Mathematics of Options, Futures, and Derivative Securities I
4 credit(s);
Instructor: Zhu, Lingjiong
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: Prikry, Karel L
Description: Student may contact the instructor or department for information.

Math 5248 Cryptology and Number Theory
4 credit(s);
Instructor: Odlyzko, Andrew
Description:

Math 5248 Cryptology and Number Theory
4 credit(s);
Instructor: Samuel, Delia
Description: Student may contact the instructor or department for information.

Math 5248 Cryptology and Number Theory
4 credit(s);
Instructor: Whitehead, Ian Michael
Description: Student may contact the instructor or department for information.
Math 5251 Error-Correcting Codes, Finite Fields, Algebraic Curves
4 credit(s);
Instructor: Rogness, Jonathan Peter
Description: Student may contact the instructor or department for information.

Math 5285H Honors: Fundamental Structures of Algebra I
4 credit(s);
Instructor: Ciocan-Fontanine, Ionut
Description: Student may contact the instructor or department for information.

Math 5335 Geometry I
4 credit(s);
Instructor: Baxter, John Robert
Description: Student may contact the instructor or department for information.

Math 5345H Honors: Introduction to Topology
A-F only, 4 credit(s);
Instructor: Messing, William
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: Zhao, Yuqin
Description: Student may contact the instructor or department for information.

Math 5490 Topics in Applied Mathematics
4 credit(s), max credits 12, 3 completions allowed;
Instructor: McGehee, Richard P
Description: Topic: "Introduction to the Mathematics of Climate". We will investigate the following questions from a mathematical perspective. What determines the Earth's surface temperature? Why does the carbon dioxide in the atmosphere affect the climate? How do changes in the Earth's orbital parameters change the climate? Why has the Earth cycled through ice ages for the last million years? Mathematical topics will include: basic energy balance models, the Earth's orbital dynamics, an introduction to paleoclimate models, and basics of radiative transfer in the atmosphere. Prerequisites are two years of calculus, including differential equations and linear algebra, and consent of the instructor. This course will count as an upper-division MATH course toward the undergraduate mathematics major programs. No background in climate science will be assumed, but some knowledge of basic classical physics (e.g., conservation of energy) will be helpful. Although the course is aimed at undergraduate mathematics majors, other majors are welcome. The course also carries graduate credit both for mathematics students and for students from other departments.

Math 5535 Dynamical Systems and Chaos
4 credit(s);
Instructor: Kim, Minsu
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
Math 5615H Honors: Introduction to Analysis I
4 credit(s);
Instructor: Conn, Jack Frederi
Description: This is the first course in a two-semester sequence of Honors Analysis. This course is proof oriented and covers the foundations of the following topics, some of which must be familiar to you on a utilitarian level from your Calculus course: the real number system, basic topology and metric spaces, sequences and series, limits, continuity, differentiation and integration.
Style: 85% Lecture, 15% Discussion.
Grading: 40% mid exam, 40% final exam, 20% problem solving.
Exam Format: A set of problems, mostly asking you to prove a given mathematical statement.

Math 5651 Basic Theory of Probability and Statistics
4 credit(s);
Instructor: Bramson, Maury Daniel
Description: Student may contact the instructor or department for information.

Math 5651 Basic Theory of Probability and Statistics
4 credit(s);
Instructor: Islak, Umit
Description: Student may contact the instructor or department for information.

Math 5651 Basic Theory of Probability and Statistics
4 credit(s);
Instructor: Hu, Wenqing
Description: Student may contact the instructor or department for information.

Math 5652 Introduction to Stochastic Processes
4 credit(s);
Instructor: Safonov, Mikhail V
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
S-N only, 1 credit(s);
Instructor: Rogness, Jonathan Peter
Description: Student may contact the instructor or department for information.

Math 8201 General Algebra
A-F only, 3 credit(s);
Instructor: Anderson, Greg William
Description: Student may contact the instructor or department for information.

Math 8211 Commutative and Homological Algebra
A-F only, 3 credit(s);
Instructor: Berkesch Zamaere, Christine
Description: Student may contact the instructor or department for information.
Math 8211 Commutative and Homological Algebra
A-F only, 3 credit(s);
Instructor: Berkesch Zamaere, Christine
Description: Student may contact the instructor or department for information.

Math 8251 Algebraic Number Theory
A-F only, 3 credit(s);
Instructor: Brubaker, Benjamin
Description: Student may contact the instructor or department for information.

Math 8253 Algebraic Geometry
A-F only, 3 credit(s);
Instructor: Tzeng, Yu-jong
Description: Student may contact the instructor or department for information.

Math 8253 Algebraic Geometry
A-F only, 3 credit(s);
Instructor: Tzeng, Yu-jong
Description: Student may contact the instructor or department for information.

Math 8280 Topics in Number Theory
A-F only, 1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Jiang, Dihua
Description: Student may contact the instructor or department for information.

Math 8280 Topics in Number Theory
A-F only, 1 credit(s), max credits 12, 12 completions allowed;
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;
Instructor: Garrett, Paul
Description: Student may contact the instructor or department for information.

Math 8300 Topics in Algebra
A-F only, 1 credit(s), max credits 12;
Instructor: Garrett, Paul
Description: Student may contact the instructor or department for information.

Math 8301 Manifolds and Topology
A-F only, 3 credit(s);
Instructor: Lawson, Tyler
Description: Student may contact the instructor or department for information.

Math 8301 Manifolds and Topology
A-F only, 3 credit(s);
Instructor: Lawson, Tyler
Description: Student may contact the instructor or department for information.

Math 8306 Algebraic Topology
A-F only, 3 credit(s);
Instructor: Lawson, Tyler
Description: Student may contact the instructor or department for information.

Math 8306 Algebraic Topology
A-F only, 3 credit(s);
Instructor: Lawson, Tyler
Description: Student may contact the instructor or department for information.
Math 8365 Riemannian Geometry
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: Calderer, Carme
Description: Student may contact the instructor or department for information.

Math 8441 Numerical Analysis and Scientific Computing
3 credit(s);
Instructor: Cockburn, Bernardo
Description: Student may contact the instructor or department for information.

Math 8445 Numerical Analysis of Differential Equations
A-F only, 3 credit(s);
Instructor: Arnold, Douglas N.
Description: Student may contact the instructor or department for information.

Math 8501 Differential Equations and Dynamical Systems I
A-F only, 3 credit(s);
Instructor: Scheel, Arnd
Description: Student may contact the instructor or department for information.

Math 8540 Topics in Mathematical Biology
A-F only, 1-3 credit(s), max credits 12, 4 completions allowed;
Instructor: Nykamp, Duane Q
Description: Student may contact the instructor or department for information.

Math 8583 Theory of Partial Differential Equations
A-F only, 3 credit(s);
Instructor: Gulliver II, Robert D
Description: Student may contact the instructor or department for information.

Math 8601 Real Analysis
A-F only, 3 credit(s);
Instructor: Mayboroda, Svitlana
Description: Student may contact the instructor or department for information.

Math 8601 Real Analysis
A-F only, 3 credit(s);
Instructor: Mayboroda, Svitlana
Description: Student may contact the instructor or department for information.

Math 8651 Theory of Probability Including Measure Theory
3 credit(s);
Instructor: Krylov, Nicolai Vladimi
Description: Student may contact the instructor or department for information.

Math 8660 Topics in Probability
1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Fristedt, Bert
Description: Student may contact the instructor or department for information.
Math 8680 Topics in Combinatorics
A-F only, 1 credit(s), max credits 12, 12 completions allowed;
Instructor: Reiner, Victor Schorr
Description: Student may contact the instructor or department for information.

Math 8680 Topics in Combinatorics
A-F only, 1-3 credit(s), max credits 12, 12 completions allowed;
Instructor: Reiner, Victor Schorr
Description: Student may contact the instructor or department for information.

Math 8701 Complex Analysis
A-F only, 3 credit(s);
Instructor: Garrett, Paul
Description: Student may contact the instructor or department for information.

Math 8701 Complex Analysis
A-F only, 3 credit(s);
Instructor: Garrett, Paul
Description: Student may contact the instructor or department for information.

Math 8801 Functional Analysis
A-F only, 3 credit(s);
Instructor: Sverak, Vladimir
Description: Student may contact the instructor or department for information.

Math 8801 Functional Analysis
A-F only, 3 credit(s);
Instructor: Sverak, Vladimir
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: Cockburn, Bernardo
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: 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: 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: Calderer, Carme
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.

Mathematics Education
145 Peik Hall

MthE 3101 Mathematics and Pedagogy for Elementary Teachers I
A-F only, 3 credit(s);
Instructor: Wiley, Bethann Marie
Description: Student may contact the instructor or department for information.

MthE 3101 Mathematics and Pedagogy for Elementary Teachers I
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: Pettis, Christy R
Description: Student may contact the instructor or department for information.

MthE 5172 Teaching Probability and Statistics
3 credit(s);
Instructor: Glancy, Aran W
Description: Student may contact the instructor or department for information.

MthE 5314 Teaching and Learning Mathematics
3 credit(s);
Instructor: Clarkson, Lesa M

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 8571 Research in Mathematics Education
3 credit(s);
Instructor: Cramer, Kathleen Ann
Description: Student may contact the instructor or department for information.

MthE 8995 Problems: Mathematics Education
1-6 credit(s), max credits 12, 12 completions allowed;
ME 2011 Introduction to Engineering  
A-F only, 4 credit(s);  
Instructor: Durfee, William K  
Description: Visit the course website for a complete description.

ME 3041 Industrial Assignment I  
A-F only, 2 credit(s);  
Instructor: Kelso, Frank M  
Description: Student may contact the instructor or department for information.

ME 3221 Design and Manufacturing I: Engineering Materials and Manufacturing Processes  
A-F only, 4 credit(s);  
Instructor: Klamecki, Barney Eugene  
Description: 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 3222 Design and Manufacturing II  
A-F only, 4 credit(s);  
Instructor: Cui, Tianhong  
Description: Student may contact the instructor or department for information.

ME 3222 Design and Manufacturing II  
A-F only, 4 credit(s);  
Instructor: Cui, Tianhong  
Description: Student may contact the instructor or department for information.

ME 3281 System Dynamics and Control  
A-F only, 4 credit(s);  
Instructor: 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  
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 3331 Thermal Sciences I
A-F only, 3 credit(s);
Instructor: Aksan, Alptekin
Description: The purpose of this course is to introduce you to the basic concepts in engineering thermodynamics. You will master thermodynamic analysis of the engineering systems that convert one form of energy to another form of energy and the systems that convert energy to work, by applying the first and the second laws of thermodynamics.
Style: 90% Lecture, 3% Film/Video, 3% Discussion, 4% Web Based.
Grading: 40% mid exam, 20% final exam, 20% quizzes, 20% written homework.

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 3332 Thermal Sciences II
A-F only, 3 credit(s);
Instructor: Dutcher, Cari Suzanne
Description: Student may contact the instructor or department for information.

ME 3333 Thermal Sciences III
A-F only, 3 credit(s);
Instructor: Simon, Terrence W
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: Chase, Thomas Richard
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: Sparrow, Ephraim M
Description: Student may contact the instructor or department for information.
ME 4082H Mechanical Engineering Honors Thesis II  
A-F only, 2 credit(s); Meets CLE req of Writing Intensive  
Instructor: Van De Ven, James Donald  
Description: Student may contact the instructor or department for information.

ME 4090 Advanced Engineering Problems  
1-4 credit(s), max credits 4, 1 completion allowed;  
Instructor: Durfee, William K  
Description: Student may contact the instructor or department for information.

ME 4131W Thermal Environmental Engineering Laboratory  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Kuehn, Thomas Howard  
Description: Student may contact the instructor or department for information.

ME 4231 Motion Control Laboratory  
A-F only, 4 credit(s);  
Instructor: Rajamani, Rajesh  
Description: Student may contact the instructor or department for information.

ME 4232 Fluid Power Control Lab  
A-F only, 4 credit(s);  
Instructor: Stelson, Kim A  
Description: Student may contact the instructor or department for information.

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 5101 Vapor Cycle Systems  
A-F only, 4 credit(s);  
Instructor: Kuehn, Thomas Howard  
Description: This course is intended primarily as a technical elective for upper division engineering students with a background in the thermal sciences. Part of the course covers power cycles and systems that use phase changes of the working fluid such as Rankine cycles and various steam power cycles. The remainder of the course focuses on vapor compression refrigeration cycles and heat pumps and the performance of various system components. Combined cycles and cogeneration cycles are also discussed. Applications include steam power plants, both fossil fuel and nuclear powered, commercial and industrial refrigeration systems, various heat pump applications, and novel combined power cycles.  
Style: 70% Lecture, 25% Discussion, 3% Field Trips, 2% Guest Speakers.  
Grading: 80% mid exam, 20% problem solving.  
Exam Format: problem solving

ME 5113 Aerosol/Particle Engineering  
A-F only, 4 credit(s);  
Instructor: Hogan, Chris  
Description: Student may contact the instructor or department for information.

ME 5228 Introduction to Finite Element Modeling, Analysis, and Design  
A-F only, 4 credit(s);  
Instructor: Tamma, Kumar K  
Description: Student may contact the instructor or department for information.

ME 5243 Advanced Mechanism Design  
A-F only, 4 credit(s);  
Instructor: Sezen, Ahmet Serdar  
Description: Student may contact the instructor or department for information.

ME 5281 Analog and Digital Control
ME 5312 Solar Thermal Technologies
A-F only, 4 credit(s);
Instructor: Kowalewski, Timothy Mariusz
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 5446 Introduction to Combustion
A-F only, 4 credit(s);
Instructor: Northrop, William
Description: Student may contact the instructor or department for information.

ME 8001 Research Ethics and Professional Practice
No Grade, 0 credit(s);
Instructor: Kortshagen, Uwe Richard
Description: Student may contact the instructor or department for information.

ME 8221 New Product Design and Business Development I
A-F only, 4 credit(s); CSE grad student, some design experience Credit will not be granted if credit has been received for: ENTR 6087;
Instructor: Durfee, William K
Description: See the course web site for a complete description.

ME 8221 New Product Design and Business Development 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: Forbes, Daniel P
Description: See the course web site for a complete description.

ME 8287 Topics in Dynamics and Control: Design and Control of Automotive Powertrain
A-F only, 4 credit(s), max credits 12, 3 completions allowed;
Instructor: Sun, Zongxuan
Description: Student may contact the instructor or department for information.

ME 8341 Conduction
A-F only, 3 credit(s);
Instructor: Kulacki, Francis A
Description: Student may contact the instructor or department for information.

ME 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 8772 Advanced Transportation Technologies Seminar
S-N only, 1 credit(s); Credit will not be granted if credit has been received for: CE 8213;
Instructor: Donath, Max
Description: Student may contact the instructor or department for information.

ME 8773 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Dumitrica, Traian
Description: Student may contact the instructor or department for information.
ME 8774 Graduate Seminar
S-N only, 1 credit(s);
Instructor: Dumitrica, Traian
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: Kuehn, Thomas Howard
Description: Student may contact the instructor or department for information.

Medical Device Innovation

MDI 5004 Clinical Foundations of Medical Device Innovation
A-F only, 3 credit(s);
Instructor: Mooradian, Daniel Lee
Description: Student may contact the instructor or department for information.

MDI 5012 Medical Industry Macro Environment
A-F only, 3 credit(s);
Instructor: Mooradian, Daniel Lee
Description: Student may contact the instructor or department for information.

MDI 5014 Medical Device Center Practicum II
A-F only, 2 credit(s);
Instructor: Hale, Joseph Eugene
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); MBA student Credit will not be granted if credit has been received for: MILI 5990;
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 Laboratory Sciences Program 15-194 Phillips Wangensteen Bldg (MMC 711)

MLSP 1010 Introduction to Medical Laboratory Science
S-N only, 1 credit(s);
Instructor: Romain, Charlotte Ann
Description: Student may contact the instructor or department for information.

MLSP 5013 Scholarly Inquiry and Analysis in Medical Laboratory Sciences
A-F only, 1 credit(s);
Instructor: Romain, Charlotte Ann
Description: Student may contact the instructor or department for information.

MLSP 5111 Concepts of Diagnostic Microbiology
A-F only, 3 credit(s);
Instructor: Ruskin, Lorna Marie
Description: Student may contact the instructor or department for information.

MLSP 5112 Application of Diagnostic Microbiology Principles
A-F only, 2 credit(s);
Instructor: Ruskin, Lorna Marie
Description: Student may contact the instructor or department for information.

MLSP 5211 Fundamentals in Hematology & Hemostasis
A-F only, 3 credit(s);
Instructor: Wiesner, Stephen Michael
Description: Student may contact the instructor or department for information.

MLSP 5212 Application of Hematology & Hemostasis Principles
A-F only, 1 credit(s);
Instructor: Wiesner, Stephen Michael
Description: Student may contact the instructor or department for information.

MLSP 5312 Body Fluid Analysis
A-F only, 2 credit(s);
Instructor: Spannaus-Martin, Donna J
Description: Student may contact the instructor or department for information.

MLSP 5312 Body Fluid Analysis
A-F only, 2 credit(s);
Instructor: Spannaus-Martin, Donna J  
Description: Student may contact the instructor or department for information.

**MLSP 5511 Principles of Immunobiology**  
A-F only, 3 credit(s);  
**Instructor:** Wiesner, Stephen Michael  
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:** Gerbi PhD, Bruce J  
Description: Student may contact the instructor or department for information.

**MPhy 5170 Basic Radiological Physics**  
3 credit(s); instr consentCredit will not be granted if credit has been received for: TRAD 7170;  
**Instructor:** Watanabe PhD, Yoichi  
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 consentCredit 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 consentCredit 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.

**MPhy 8294 Directed Research in Biophysical Sciences and Medical Physics**  
1-12 credit(s), max credits 12, 1 completion allowed;  
**Instructor:** Ritenour, Russell  
Description: Student may contact the instructor or department for information.

**Medicinal Chemistry**  
*8-101 Weaver-Densford Hall*

**MedC 8001 General Principles of Medicinal Chemistry**  
A-F only, 3 credit(s);  
**Instructor:** Finzel, Barry C.  
Description: Student may contact the instructor or department for information.

**MedC 8050 Physical and Mechanistic Organic Chemistry**  
A-F only, 2 credit(s);  
**Instructor:** Harki, Daniel A  
Description: Student may contact the instructor or department for information.

**MedC 8100 Medicinal Chemistry Seminar**
MedC 8413 Chemistry of Nucleic Acids
A-F only, 3 credit(s);
Instructor: Tretyakova, Natalia Yurievna
Description: Student may contact the instructor or department for information.

MedC 8471 High Throughput Drug Discovery
A-F only, 3 credit(s);
Instructor: Haskell-Luevano, Carrie
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
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Bachrach, Bernard S
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: France in the Middle Ages
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Reyerson, Kathryn L
Description: France was at the forefront of European development in the Middle Ages. It was the land of Gothic cathedrals and the site of the Hundred Years War. This course examines the development of the kingdom of France from the tenth through the mid-fifteenth centuries, focusing on the reigns of the Capetian and Valois dynasties that include Eleanor of Aquitaine and Saint Louis, as well as Charles VII. We will explore life in medieval France through texts, film, and PowerPoints to trace the foundation of the country we know today as an arbiter of taste and a center of culture. Along the way we will deal with murder, mysteries, and misconceptions.
Style: 60% Lecture, 20% Film/Video, 20% Discussion.
Grading: 25% mid exam, 30% final exam, 30% reports/papers, 15% class participation. ABCD..F and S/N. S requires a C.
Exam Format: short and long essay

MeSt 3610 Topics in Medieval Studies: Age of Constantine the Great
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Nicholson, Oliver
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: Dreams and Middle English Dream Visions
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Krug, Rebecca L
Description: Student may contact the instructor or department for information.

MeSt 3610 Topics in Medieval Studies: Chaucer
3 credit(s), max credits 24, 8 completions allowed;
Instructor: Scheil, Andrew
Description: Student may contact the instructor or department for information.
MeSt 5610 Advanced Topics in Medieval Studies: Archaeology of the British Isles
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Wells, Peter S
Description: Student may contact the instructor or department for information.

MeSt 5610 Advanced Topics in Medieval Studies: Introduction to Middle High German
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Wakefield, Ray M
Description: Student may contact the instructor or department for information.

MeSt 5610 Advanced Topics in Medieval Studies: Old Norse Language and Literature
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 5610 Advanced Topics in Medieval Studies: Crusades: Islam, Christianity in Mediterranean
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Lower, Michael
Description: Student may contact the instructor or department for information.

MeSt 5610 Advanced Topics in Medieval Studies: Style and Power: Art of Italian Renaissance Courts
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Bartoli, Roberta
Description: Student may contact the instructor or department for information.

MeSt 8110 Seminar in Medieval Studies: Crusades: Islam, Christianity in Mediterranean
A-F only, 3 credit(s), max credits 48, 16 completions allowed;
Instructor: Lower, Michael
Description: In this seminar we will explore the crucial role of the crusades in the development of Muslim-Christian relations and Mediterranean societies. While the crusades are often studied solely as an aspect of European history, we will attempt instead to open up a broader perspective on a movement that brought peoples from Iceland to Inner Asia together in complex sets of relations that crossed multiple borders of pre-modern belief and belonging. Pursuing this new approach will entail serious engagement with non-European perspectives and with fields of inquiry -- such as Mediterranean and Near Eastern Studies -- that traditionally have stood outside the purview of crusades history. Particular areas of focus will include: the multi-confessional and multi-ethnic Middle East in the age of the crusades; the development of ideologies of religious difference in the Muslim, Christian, and Jewish traditions, with special reference to holy war; and the legacy of the crusades in modern inter-religious relations, from the nineteenth-century European colonial period to the present. Class meetings will alternate between group discussions of common readings and in-class presentations of individually assigned readings.
Style: 10% Lecture, 50% Discussion, 40% Student Presentation.
Grading: 50% reports/papers, 30% in-class presentation, 20% class participation.

MeSt 8110 Seminar in Medieval Studies: Poetry, Politics & Community High Medieval France
A-F only, 3 credit(s), max credits 48, 16 completions allowed;
Instructor: Franklin-Brown, Mary
Description: Student may contact the instructor or department for information.

Microbial Engineering

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] Credit will not be granted if credit has been received for: VBS 2032;
Instructor: Mohr, Christian D
Description: Microbiology 3301 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] Credit will not be granted if credit has been received for: MICB 3301;
Instructor: Mohr, Christian D
Description: Microbiology 3303 will provide an extensive overview of the microbial world, highlighting the structure, function, and diversity of microorganisms, including bacteria, fungi, protozoa, and viruses. Topics will include microbial taxonomy, anatomy, physiology, biochemistry, molecular biology, and ecology. Microbial pathogenesis, immunology, and infectious disease will also be presented and discussed.

MicB 4111 Microbial Physiology and Diversity
3 credit(s);
Instructor: Bond, Daniel R
Description: Structural/functional organization of bacteria/archaea. Energy metabolism utilizing light, inorganic/organic chemicals. Cell morphologies, roles/assembly of surface structures. Growth/survival mechanisms in various extreme environments. Adaptation to changing conditions by development of specialized cells/structures, altering metabolic patterns. Bacterial genetics and molecular techniques to understand sophisticated metabolic cascades in a diversity of bacteria - from the bottom of the ocean, to the human gut, to Antarctica. The course blends the study of well understood processes along with new metabolic pathways not yet found in text books.

MicB 4131 Immunology
3 credit(s); [2022 or VPB 2022 or Biol 2032 or VPB 2032 or VBS 2032 or 3301 or MicB 3301], [BIOC 3021 or BIOC 4331] Credit will not be granted if credit has been received for: VPM 4131;
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:** Molitor, Thomas William  
**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 give 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:** 10% mid exam, 10% final exam, 55% reports/papers, 5% written homework, 8% in-class presentation, 10% class participation, 2% problem solving.

### MicB 4793W Directed Studies: Writing Intensive

**S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive**  
**Instructor:** Schiff, Leslie Ann  
**Description:** The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

### MicB 4794W Directed Research: Writing Intensive

**S-N only, 1-7 credit(s), max credits 15, 15 completions allowed; Meets CLE req of Writing Intensive**  
**Instructor:** Schiff, Leslie Ann  
**Description:** The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has
MicB 4993 Directed Studies
S-N only, 1-7 credit(s), max credits 36, 6 completions allowed; Meets CLE req of Writing Intensive
Instructor: Schiff, Leslie Ann
Description: The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

MicB 4994 Directed Research
S-N only, 1-7 credit(s), max credits 28, 4 completions allowed;
Instructor: Jenkins, Marc
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

MicB 4794W Directed Research: Writing Intensive
S-N only, 1-7 credit(s), max credits 15, 15 completions allowed; Meets CLE req of Writing Intensive
Instructor: Grahnick, Jeffrey A
Description: The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.
**MicB 4994 Directed Research**
S-N only, 1-7 credit(s), max credits 28, 4 completions allowed;
Instructor: Schiff, Leslie Ann
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

**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 8010 Microbial Pathogenesis**
A-F only, 3 credit(s);
Instructor: Southern, Peter
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/B graduate students for their qualifying examinations. As such, MicA 8012 is only open to MicA/B 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/B graduate students for their qualifying examinations. As such, MicA 8012 is only open to MicA/B graduate students.

**MicA 8094 Research in Microbiology, Immunology, and Cancer Biology**
S-N only, 1 credit(s), max credits 5, 5 completions allowed;
Instructor: Jenkins, Marc
Description: Student may contact the instructor or department for information.

**MicA 8910 Seminar: Faculty Research Topics**
No Grade, 0 credit(s);
Instructor: Kaplan, Daniel H
Description: Student may contact the instructor or department for information.
MIa 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 110 Armory

Mil 103 MS I Zero Credit Lead Lab
A-F only, 0 credit(s);
Instructor: Ruedebusch, Mitchell Adam
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: Ruedebusch, Mitchell Adam
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: Lisius, Adam Charles
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: Ruedebusch, Mitchell Adam
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: Ruedebusch, Mitchell Adam
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: Lisius, Adam Charles
Description: Student may contact the instructor or department for information.

Mil 3401 Developing Adaptive Leaders
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: Carlson, Jordan Christopher
Description: Student may contact the instructor or department for information.

Mil 3970 Military History
A-F only, 3 credit(s);
Instructor: Axtell, Thomas E
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: Clarke, Duncan John
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: Neufeld, Thomas Peter
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 History & Practice of Funeral Directing I: Antiquity - 1861
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
**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 3048 Microbiology and Pathology for Funeral Service**
- A-F only, 4 credit(s);
- Instructor: Mathews, Michael Clark
- Description: Student may contact the instructor or department for information.

**Mort 3050 Pathology**
- A-F only, 3 credit(s);
- Instructor: Mathews, Michael Clark
- Description: Student may contact the instructor or department for information.

**Mort 3051 Restorative Art**
- A-F only, 2 credit(s);
- Instructor: LaCourt, Jody Lynn
- Description: Student may contact the instructor or department for information.

**Mort 3061 Embalming Theory**
- A-F only, 3 credit(s);
- Instructor: LaCourt, Jody Lynn
- Description: Student may contact the instructor or department for information.

**Mort 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.
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 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: Garrett, Lisa Ann
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.
Style: Online
Grading: See attached syllabus

MdS 3201 Project Registration 1
OPT No Aud, 3 credit(s);
Instructor: Garrett, Lisa Ann
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. Complete project developed in MdS 3101 by conducting research, accomplishing project outcome(s), securing narrative evaluation from project adviser/evaluator.
Style: Online
Grading: See attached syllabus

MdS 3202 Project Registration 2
A-F only, 3 credit(s);
Instructor: Garrett, Lisa Ann
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.
Style: Online
Grading: See attached syllabus
MdS 3203 Project Registration 3
A-F only, 3 credit(s);
Instructor: Garrett, Lisa Ann
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.
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: Nelson-Mayson, Lin
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: Currie, Scott
Description: This course will trace the musical, cultural, historical, social, and political evolution of rock music, from its antecedents in mid-19th century America through the early 1970s, emphasizing the manner in which African, European, and other ethnic traditions combined into a uniquely American hybrid form which quickly took root abroad in England and beyond.
Style: 67% Lecture, 33% Discussion.
Grading: 16% mid exam, 16% final exam, 48% reports/papers, 16% written homework, 4% class participation.

**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: Mercer-Taylor, Peter J
Description: This course is intended as an introduction to the process of serious musical listening. Though the historical styles, forms, and cultural foundations of European classical music will form the core of our subject matter—and it is exclusively on this material that you will be graded—we will stray repeatedly into popular music traditions in the course of our explorations.
Style: 85% Lecture, 15% Discussion.
Grading: 50% mid exam, 40% final exam, 10% other evaluation. attendance
Exam Format: Identification and short-answer questions.

**Mus 1051 Class Piano for Nonmusic Majors I**
OPT No Aud, 2 credit(s);
Instructor: STAFF
Description: A beginning course for non-music majors with little or no keyboard background. Emphasis on basis functional skills, such as reading, harmonizing, playing by ear and improvising, along with basic technique, elementary repertoire, and music theory (written). Taught by graduate assistants in an electronic multi-piano lab. Includes lecture, group and individual performance, and some individual instruction. Outside practice is required. Practice rooms may be rented through the School of Music. Text: Contemporary Class Piano, 7th ed. by Elyse Mach. Mus 1051 covers Units 1-5, including intervals up to a fifth, major scales and key signatures, major and minor 5-finger patterns and triads, and accompaniments using I, IV and V7 chords.
Style: 10% Lecture, 90% Laboratory.
Grading: 20% mid exam, 25% final exam, 40% quizzes, 10% class participation, 5% other evaluation. two written projects
Exam Format: Individual keyboard performance (plus some written theory).

**Mus 1052 Class Piano for Non Music Majors II**
OPT No Aud, 2 credit(s);
Instructor: STAFF
Description: Continuation of Mus 1051. Emphasis on basic functional skills, such as reading, harmonizing, playing by ear
and improvising, along with basic technique, elementary repertoire, and music theory (written). Taught by graduate assistants in an electronic multi-piano lab. Includes lecture, group and individual performance, and some individual instruction. Outside practice is required. Practice rooms may be rented through the School of Music. Text: Contemporary Class Piano, 7th ed. by Elyse Mach. Mus 1052 begins with a review of Mus 1051 and covers Units 6-10, including major and minor scales; intervals up to an octave; accompaniment styles; ABA form; syncopation; secondary chords; pedaling; other scale forms; harmonizing with i, iv, and V7 in minor; jazz styles; 2-hand accompaniments; and major and minor 7th chords.

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

**Grading:** 20% mid exam, 25% final exam, 5% special projects, 40% quizzes, 10% class participation.

**Exam Format:** Individual keyboard performance (plus some written theory).

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**Mus 1151 Piano: Class Lessons I**

A-F only, 2 credit(s);

**Instructor:** STAFF

**Description:** A beginning course for freshman music majors or minors with limited keyboard background. Co-requisite for freshman music theory. Taught by graduate assistants in an electronic piano lab. Emphasis is on functional skills, such as reading, transposing, harmonizing, improvising, and playing by ear, along with keyboard theory, technique, and repertoire. Includes lecture, group and individual performance, and some individual instruction. Text: "Group Piano for Adults Book I" by Lancaster and Renfrow, 2nd ed. and "Easy Classics to Moderns" by Agay. Mus 1151 covers Units 1-13. Students with previous piano background should contact the School of Music for information regarding placement or credit by exam.

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

**Grading:** 25% mid exam, 25% final exam, 40% quizzes, 10% class participation.

**Exam Format:** individual keyboard performance

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**Mus 1155 Keyboard Skills I**

A-F only, 2 credit(s);

**Instructor:** Karese, Elizabeth Wilhelmina

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

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**Mus 1260 Voice Class**

2 credit(s), max credits 4;

**Instructor:** Olson, Jennifer Lynn

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

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**Mus 1260 Voice Class**

2 credit(s), max credits 4;

**Instructor:** Kozisek, David Andrew

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

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**Mus 1260 Voice Class**

2 credit(s), max credits 4;

**Instructor:** Martin, Jeffrey Alexander

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

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**Mus 1471 Guitar: Class Lessons I**

A-F only, 2 credit(s);

**Instructor:** STAFF

**Description:** Course covers fundamentals for beginning guitarist; course is also open to students who already play, but want to improve finger style skills and reading music for guitar skills. Emphasis on performance (in class learning), variety of styles (classical, blues, rock, etc.), learning chords, beginning reading music notation. Students must provide guitar. Class time: 30% lecture, 70% in class practice Work load: final exam, 3 quizzes Grade: 20% quizzes, 20% exam, 60% in class participation Exam format: performance/written

**Style:** 40% Lecture. in-class performance

**Grading:** 25% mid exam, 25% final exam, 50% class participation.

**Exam Format:** performance

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**Mus 1472 Guitar: Class Lessons II**

A-F only, 2 credit(s);

**Instructor:** Barnic, Branko

**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: Fitzpatrick, Jacob Daniel  
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: Arthur, Jacob  
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 crosscultural 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: Creating Music: An Introduction  
A-F only, 3 credit(s);  
Instructor: Sorenson, Dean Patrick  
Description: Student may contact the instructor or department for information.

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: Mercer-Taylor, Peter J  
Description: This course is intended as an introduction to the process of serious musical listening. Though the styles, forms, and cultural foundations of European classical music will form the core of our subject matter-and it is exclusively on this material that you will be graded—we will stray repeatedly into popular music traditions in the course of our explorations.  
Style: 85% Lecture, 15% Discussion.
Grading: 42% mid exam, 32% final exam, 16% reports/papers, 10% other evaluation. attendance
Exam Format: Identification and short-answer questions

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: Shoultz, George Phillip
Description: Student may contact the instructor or department for information.

Mus 3200 Campus Singers
2 credit(s), max credits 16, 8 completions allowed;
Instructor: Chan, Katherine
Description: Student may contact the instructor or department for information.

Mus 3230 Chorus
1-2 credit(s), max credits 16, 8 completions allowed;
Instructor: Shoultz, George Phillip
Description: Student may contact the instructor or department for information.

Mus 3241 Vocal Literature (German Lieder) and Pedagogy
A-F only, 1 credit(s);
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

Mus 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: Boyd, Lindsay Ross
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: Hawkins, Dennis Alan
  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: Dowdy, Brian E
  Description: Student may contact the instructor or department for information.

Mus 3430 Campus Orchestra
  2 credit(s), max credits 16, 8 completions allowed;
  Instructor: Dowdy, Brian E
  Description: Student may contact the instructor or department for information.

Mus 3440 Chamber Ensemble
  A-F only, 1 credit(s), max credits 8, 8 completions allowed;
  Instructor: STAFF
  Description: Chamber ensembles provide an opportunity for music majors to study and perform chamber music (generally works for three or more instruments) with a faculty coach. There is at least one public performance by each group during the semester. Qualified non-music majors may be permitted to register for chamber music with instructor permission following an audition. For information regarding participation in the School of Music chamber music program, please see: http://www.music.umn.edu/enscomp/chamber.php
  Style: 100% Laboratory.
  Grading: performances

Mus 3480 Marching Band
  A-F only, 2 credit(s), max credits 12, 6 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: Damschroder, David A
  Description: Student may contact the instructor or department for information.

Mus 3508 Review of Tonal Theory
  2 credit(s);
  Instructor: Fitzpatrick, Jacob Daniel
  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: Damschroder, David A
Description: Student may contact the instructor or department for information.

Mus 3518 Review of Ear-Training and Sight-Singing
1 credit(s);
Instructor: STAFF
Description: A course intended for transfer and graduate music majors who, based on the Placement Exam for Entering Students, require remediation in ear-training and sight-singing. Mus 3518 covers at a fast pace the ear-training content of Mus 1502 (Theory II) and Mus 3501 (Theory III). After Mus 3518, the sequence continues with Mus 3502 (for students who need both theory and ear-training review for the contents of Theory IV) or Mus 3511 (for students who need only ear-training review for the contents of Theory IV).
Style: 40% Discussion, 50% Laboratory. sight-singing auditions
Grading: 20% mid exam, 20% final exam, 10% quizzes, 50% other evaluation. sight-singing auditions
Exam Format: dictation

Mus 3602W History of Western Music II
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Grayson, David A
Description: Student may contact the instructor or department for information.

Mus 3602W History of Western Music II
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Stoebig, Andrew T
Description: Student may contact the instructor or department for information.

Mus 3950 Topics in Music: Sound Recording Laboratory
2 credit(s), max credits 15, 5 completions allowed;
Instructor: Vishneski, Jack
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 5101 Piano Pedagogy I
2 credit(s);
Instructor: Karelse, Elizabeth Wilhelmina
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. individual work with students
Grading: 33% reports/papers, 33% attendance, 33% class participation.
Mus 5181 Advanced Piano Literature I  
A-F only, 2 credit(s);  
Instructor: Hobbs, Kevin Akira  
**Description:** Student may contact the instructor or department for information.

Mus 5230 Chorus  
1-2 credit(s), max credits 16, 8 completions allowed;  
Instructor: Shoultz, George Phillip  
**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 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 5333 Post-tonal Theory and Analysis II  
A-F only, 3 credit(s);  
Instructor: Skidmore, Tiffany M  
**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: Dowdy, Brian E
  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: Cherlin, Michael
  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 5480 University Brass Choir
  1 credit(s), max credits 8, 8 completions allowed;
  Instructor: Baldwin, David B
  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 5561 Orchestration I
  A-F only, 3 credit(s);
  Instructor: Lubet, Alex
  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 5620 Topics in Opera History: Italian Opera from Mozart to Verdi
   A-F only, 3 credit(s), max credits 6;
   Instructor: Mercer-Taylor, Peter J
   Description: Student may contact the instructor or department for information.

Mus 5624 Music of J. S. Bach
   A-F only, 3 credit(s);
   Instructor: Kuntz, Danielle M
   Description: Student may contact the instructor or department for information.

Mus 5950 Topics in Music: Performance Practice
   3 credit(s), max credits 15, 15 completions allowed;
   Instructor: Grayson, David A
   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 8112 Instrumental Repertoire: Reduction and Realization
   A-F only, 2 credit(s);
   Instructor: Lovelace, Timothy
   Description: Student may contact the instructor or department for information.

Mus 8131 Advanced Keyboard Skills
   A-F only, 2 credit(s);
   Instructor: Billmeyer, Dean W
   Description: Student may contact the instructor or department for information.

Mus 8237 Score Study: Choral
   A-F only, 3 credit(s);
   Instructor: Mehaffey, Matthew Wayne
   Description: Student may contact the instructor or department for information.

Mus 8450 Graduate Seminar in Conducting
   A-F only, 3-4 credit(s), max credits 32, 8 completions allowed;
   Instructor: 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: Mehaffey, Matthew Wayne
   Description: Student may contact the instructor or department for information.

Mus 8450 Graduate Seminar in Conducting
   A-F only, 3-4 credit(s), max credits 32, 8 completions allowed;
   Instructor: Smith, Mark Russell
   Description: Student may contact the instructor or department for information.

Mus 8501 Music Theory Pedagogy
   A-F only, 3 credit(s);
   Instructor: Bribitzer-Stull, Matt
   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 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: Post-tonal String Quartets
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Cherlin,Michael
Description: Student may contact the instructor or department for information.

Mus 8640 Seminar in Musicology: Music, Gender, and Sexuality
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Harness, Kelley A
Description: Student may contact the instructor or department for information.

Mus 8864 Current Issues in Ethnomusicology
A-F only, 3 credit(s);
Instructor: Sumera, Matthew M
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/Piano%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: De Haan, John
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: 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 1104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Martin, Jeffrey Alexander
Description: Student may contact the instructor or department for information.

MusA 1104 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 1106 Viola: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Konkol, Korey Bernard
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 1109 Flute: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Davis, Immanuel
Description: Student may contact the instructor or department for information.

MusA 1112 Clarinet: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Fiterstein, Alexander
Description: Student may contact the instructor or department for information.

MusA 1115 French Horn: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
Instructor: Lemen, Caroline May
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 D
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 1123 Guitar: Elective (non-major in music)
  A-F only, 2-4 credit(s), max credits 32, 8 completions allowed;
  Instructor: Petkovic,Milena
  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: Barnic,Branko
  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: Artymiw, Lydia
  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: Braginsky, 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: Charlson, Elizabeth Wolff
  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 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 1206 Viola: Music Education and BA
  A-F only, 2 credit(s), max credits 16, 8 completions allowed;
  Instructor: Konkol, Korey Bernard
  Description: Student may contact the instructor or department for information.
MusA 1207 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 1209 Flute: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Davis, Immanuel
Description: Student may contact the instructor or department for information.

MusA 1211 Oboe: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Snow, John D
Description: Student may contact the instructor or department for information.

MusA 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: 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 1301 Piano: Music Major
  A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
  Instructor: Charlson,Elizabeth Wolff
  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 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: Radovanlija, 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: Olson, Jennifer Lynn
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 1404 Voice: Music Major Secondary (undergraduate)
  A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
  Instructor: Martin, Jeffrey Alexander
  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: Hildebrand, Jacob Alexander
  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: Barnic, Branko
  Description: Student may contact the instructor or department for information.

MusA 1901 Piano: Music Major Transfer
  A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
  Instructor: Charlson, Elizabeth Wolff
  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;
MusA 1904 Voice: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Zabala, Adriana
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 1905 Violin: 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 1907 Cello: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Remenikova, Tanya
Description: Student may contact the instructor or department for information.

MusA 1909 Flute: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Bogorad, Julia A
Description: Student may contact the instructor or department for information.

MusA 1911 Oboe: Music Major Transfer
A-F only, 2-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Snow, John D
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
MusA 2201 Piano: Music Ed and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Charlson, Elizabeth Wolff
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 2207 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 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 2212 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 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 2214 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 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 2219 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 2221 Percussion: Music Education 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 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 2222 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 2223 Guitar: Music Education and BA
A-F only, 2 credit(s), max credits 16, 8 completions allowed;
Instructor: Radovanija, 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: 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 2301 Piano: Music Major  
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;  
Instructor: Charlson, Elizabeth Wolff  
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 2322 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 2323 Guitar: Music Major
A-F only, 2-4 credit(s), max credits 16, 8 completions allowed;
Instructor: Radovanlijia, Maja
Description: Student may contact the instructor or department for information.

MusA 3101 Piano: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: STAFF
Description: Individual piano instruction by graduate piano TAs for upper-division non-music majors with prior piano study. Weekly 30-minute or 60-minute lessons are arranged individually with the instructor, along with a short jury exam at the end of the semester. Requires permission by the Class Piano Coordinator or a piano TA. Information on applied music fees and how to obtain permission to register may be obtained from the School of Music Office, Room 100 Ferguson Hall, (612) 624-5740, or at http://music.umn.edu/students/Piano%20Ap%201101_3101.pdf
Style: Individual Lessons
Grading: 40% final exam, 60% other evaluation. Weekly lesson preparation
Exam Format: Jury (Individual keyboard performance)

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Del Santo, Jean Marie
Description: Student may contact the instructor or department for information.

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Olson, Jennifer Lynn
Description: Student may contact the instructor or department for information.

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Kozisek, David Andrew
Description: Student may contact the instructor or department for information.

MusA 3104 Voice: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Martin, Jeffrey Alexander
Description: Student may contact the instructor or department for information.

MusA 3123 Guitar: Elective (non-major in music)
A-F only, 2-4 credit(s), max credits 16, 4 completions allowed;
Instructor: Barnic, Branko
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: Zaro-Mullins, Wendy
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 3204 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 3206 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 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 3209 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 3211 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 3213 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 3215 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 3216 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 3217 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 3219 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 3221 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 3223 Guitar: Music Education and BA
A-F only, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: Radovanija, Maja
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 3301 Piano: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Charlson, Elizabeth Wolff
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;
Instructor: Zaro-Mullins, Wendy
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: De Haan, John
Description: Student may contact the instructor or department for information.

MusA 3304 Voice: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Zawisza, Philip David
Description: Student may contact the instructor or department for information.

MusA 3305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Zabala, Adriana
Description: Student may contact the instructor or department for information.

MusA 3305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Kim, Young-Nam
Description: Student may contact the instructor or department for information.

MusA 3305 Violin: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: O'Reilly, Sally P
Description: Student may contact the instructor or department for information.

MusA 3306 Viola: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Konkol, Korey Bernard
Description: Student may contact the instructor or department for information.

MusA 3307 Cello: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Remenikova, Tanya
Description: Student may contact the instructor or department for information.

MusA 3308 Double Bass: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Brown, Christopher Craig
Description: Student may contact the instructor or department for information.

MusA 3309 Flute: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Bogorad, Julia A
Description: Student may contact the instructor or department for information.

MusA 3309 Flute: Music Major
A-F only, 2-4 credit(s), max credits 24, 8 completions allowed;
Instructor: Davis, Immanuel
Description: Student may contact the instructor or department for information.

MusA 3311 Oboe: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Snow, John D
Description: Student may contact the instructor or department for information.
MusA 3312 Clarinet: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Fiterstein, Alexander
Description: Student may contact the instructor or department for information.

MusA 3313 Saxophone: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Wyatt, Angela J.
Description: Student may contact the instructor or department for information.

MusA 3313 Saxophone: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Rousseau, Eugene E
Description: Student may contact the instructor or department for information.

MusA 3314 Bassoon: Music Major
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Miller Jr, John W
Description: Student may contact the instructor or department for information.

MusA 3314 Bassoon: Music Major
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 3314 Bassoon: Music Major
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 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: Kim,Soyoun
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 5402 Harpsichord: 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 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: De Haan, John
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 5404 Voice: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Zabala, Adriana
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 5416 Trumpet: Music Major Secondary (graduate)
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 5418 Baritone: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Ashworth, Thomas Jackson
Description: Student may contact the instructor or department for information.

MusA 5423 Guitar: Music Major Secondary (graduate)
A-F only, 2-4 credit(s), max credits 24, 12 completions allowed;
Instructor: Radovanlija, Maja
Description: Student may contact the instructor or department for information.

MusA 8301 Piano: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Artymiw, Lydia
Description: Student may contact the instructor or department for information.

MusA 8301 Piano: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Braginsky, Alexander
Description: Student may contact the instructor or department for information.

MusA 8301 Piano: Music Major (graduate)
A-F only, 2-4 credit(s), max credits 48, 24 completions allowed;
Instructor: Charlson, Elizabeth Wolff
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 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: Ni lubowski, 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: Tranter, John Harrington
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: Mason, Greta Jean
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: Johnston, Jeremy Raymond
Description: Student may contact the instructor or department for information.

MuEd 3519 Advanced Conducting and Repertoire (Instrumental)
A-F only, 2 credit(s);
Instructor: Luckhardt, Jerry M
Description: Student may contact the instructor or department for information.

MuEd 3802 Guitar I for Music Education and Music Therapy Majors: Developing Group Songleading Skills
A-F only, 2 credit(s);
Instructor: Schwartzberg, Edward Todd
Description: Student may contact the instructor or department for information.

MuEd 5350 Student Teaching in Classroom Music
A-F only, 4-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Addo PhD, Akosua O
Description: 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: Clementson, Casey Jill
Description: Student may contact the instructor or department for information.

MuEd 5803 Therapeutic Management in Music Settings
A-F only, 4 credit(s);
Instructor: Silverman, Michael J
Description: Student may contact the instructor or department for information.

MuEd 5804 Music Therapy Methods and Procedures I
A-F only, 4 credit(s);
Instructor: Schwartzberg, Edward Todd
Description: Student may contact the instructor or department for information.
MuEd 5807 Psychiatric Music Therapy
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed;
Instructor: Silverman, Michael J
Description: Student may contact the instructor or department for information.

MuEd 5855 Music Therapy Internship
S-N only, 1-13 credit(s), max credits 13, 1 completion allowed;
Instructor: Silverman, Michael J
Description: Student may contact the instructor or department for information.

MuEd 8118 Qualitative Research in Arts Education
A-F only, 3 credit(s);
Instructor: Addo PhD, Akosua O
Description: Student may contact the instructor or department for information.

MuEd 8210 Advanced Music Teaching Seminar
A-F only, 1 credit(s), max credits 3, 3 completions allowed;
Instructor: Hamann, Keitha Lucas
Description: Student may contact the instructor or department for information.

MuEd 8211 Foundations of Music Education
A-F only, 3 credit(s);
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.

Naval Science 203 Armory

Nav 1000 Professional Training in Naval Science
S-N only, 1 credit(s);
Instructor: Jiabia, Michael Francis
Description: Student may contact the instructor or department for information.

Nav 1101 Introduction to Naval Science
A-F only, 3 credit(s);
Instructor: Bastemeyer, Devin James
Description: Student may contact the instructor or department for information.

Nav 2000 Professional Training in Naval Science
S-N only, 1 credit(s);
Instructor: Jiabia, Michael Francis
Description: Student may contact the instructor or department for information.

Nav 2201 Ship Systems I: Naval Engineering
A-F only, 3 credit(s);
Instructor: Gustafson, Tyler William
Description: Student may contact the instructor or department for information.

Nav 3000 Professional Training in Naval Science
S-N only, 1 credit(s);
Instructor: Jiabia, Michael Francis
Description: Student may contact the instructor or department for information.

Nav 3302 Navigation II: Seamanship and Ship Operations
A-F only, 3 credit(s);
Nav 4000 Professional Training in Naval Science
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Jiabia, Michael Francis
Description: Student may contact the instructor or department for information.

Nav 4401W Leadership and Management I
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Krueger, Jason August
Description: Student may contact the instructor or department for information.

Nav 4410 Amphibious Warfare
A-F only, 3 credit(s);
Instructor: Jiabia, Michael Francis
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 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 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 8208 Neuropsychopharmacology
A-F only, 3 credit(s);
Instructor: Roy, Sabita
NSc 8217 Systems and Computational Neuroscience  
S-N only, 2 credit(s);  
Instructor: Ghose, Geoffrey M  
Description: Student may contact the instructor or department for information.

NSc 8320 Readings in Neurobiology  
1-4 credit(s), max credits 4, 4 completions allowed;  
Instructor: Fairbanks, Carolyn Ann  
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.

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: Mermelstein, Paul G  
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. This course fulfills the Liberal Education requirement of Technology and Society.  
Style: 80% Lecture, 20% Film/Video.  
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
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 connectivity. 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 2 hours of laboratory and as well as the three lectures per week.

**Nsci 3101 Introduction to Neurobiology I: Molecular, Cellular, and Systems**
- **A-F only, 3 credit(s);**
- **BIOL 3101 (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:** Wilcox, George L
- **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 NSci 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.
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 4105 Neurobiology Laboratory I**

*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**

*Description:* The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of undergraduate Studies. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

**Grading:** 100% reports/papers.

**Nsci 4794W Directed Research: Writing Intensive**

*Description:* The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides.

Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schiff002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are
expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

Grading: 100% reports/papers.

Nsci 4993 Directed Studies

S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: STAFF
Description: The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

Nsci 4994 Directed Research

S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: STAFF
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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
Nor 1001 Beginning Norwegian
5 credit(s); Credit will not be granted if credit has been received for: NOR 4001;
Instructor: Ianeva-Lockney, Arsena
Description: 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);1002 Credit will not be granted if credit has been received for: NOR 4003;
Instructor: Zmirowska-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.

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: Zmirowska-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 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.

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 Nursing Guarantee Student Seminar
1 credit(s);
Instructor: O'Conner-Von PhD, Susan K.
Description: Student may contact the instructor or department for information.

Nurs 2001 Human Growth and Development: A Life Span Approach
3 credit(s);
Instructor: Buechler, Leisl Susanna
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 (not online) 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, 3 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: Dean EdD, Patrick Joseph
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: Schultz, Deanna L
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: Flaten, Carol
Description: Student may contact the instructor or department for information.

Nurs 3806 Nurse as Professional
A-F only, 2 credit(s);
Instructor: Kirk PhD, Laura Nelson
Description: Student may contact the instructor or department for information.

Nurs 3806 Nurse as Professional
A-F only, 2 credit(s);
Instructor: Rhudy, Lori M
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);
Instructor: Dean EdD, Patrick Joseph
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);
Instructor: Kunkei, Dorcas Elisabeth
Description: Student may contact the instructor or department for information.

Nurs 4106 Nurse as Collaborator
A-F only, 1 credit(s);
Instructor: Rowan, Mary M.
Description: Student may contact the instructor or department for information.

Nurs 4301 Person Centered Care of Adults and Older Adults II
A-F only, 4 credit(s);
Instructor: Severson, Mary Ann
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 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: Steffes, Mary Teresa
Description: Student may contact the instructor or department for information.

Nurs 4305 Practicum: Community-based Care of Families Across Life Span
A-F only, 3 credit(s);
Instructor: Findorff, Mary Jocelyn
Description: Student may contact the instructor or department for information.

Nurs 4305 Practicum: Community-based Care of Families Across Life Span
A-F only, 3 credit(s);
Instructor: Pfeiffer, Jeanne
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: Jackson, Melissa Rene
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 4312 Patient Centered Care: Nursing Care of Families II
A-F only, 4 credit(s);
Instructor: McBride, Grace Julia
Description: Student may contact the instructor or department for information.
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<th>Course Code</th>
<th>Course Title</th>
<th>Credit(s)</th>
<th>Instructor(s)</th>
<th>Description</th>
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<tr>
<td>Nurs 4321</td>
<td>Public Health Nursing</td>
<td>A-F, 2</td>
<td>Flaten, Carol</td>
<td>Student may contact the instructor or department for information.</td>
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<tr>
<td>Nurs 4402</td>
<td>Taking Ethical Action in Health Care</td>
<td>A-F, 1</td>
<td>Duckett, Laura J</td>
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<tr>
<td>Nurs 4404V</td>
<td>Honors: Applied Research and Research Utilization</td>
<td>A-F, 3</td>
<td>Garcia PhD, Carolyn Marie</td>
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<td>Nurs 4430</td>
<td>Immunization Tour</td>
<td>S-N, 1</td>
<td>Uden, Donald Lawrence</td>
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<td>Nurs 4703</td>
<td>Specialty Focused Practicum I</td>
<td>A-F, 4</td>
<td>Steffes, Mary Teresa</td>
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<tr>
<td>Nurs 4704</td>
<td>Continuum of Care Practicum</td>
<td>A-F, 2</td>
<td>Weber, Eileen P</td>
<td>Student may contact the instructor or department for information.</td>
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<tr>
<td>Nurs 4704</td>
<td>Continuum of Care Practicum</td>
<td>A-F, 2</td>
<td>Giama, Nasra</td>
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<td>Nurs 4706</td>
<td>Transition to Practice</td>
<td>A-F, 1</td>
<td>Mueller, Christine Ann</td>
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<td>Nurs 4777W</td>
<td>Senior Project in the Nursing Major</td>
<td>A-F, 3</td>
<td>Lindquist, Ruth Ann</td>
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<tr>
<td>Nurs 4800</td>
<td>Nursing Topics</td>
<td>0-16</td>
<td>Dean EdD, Patrick Joseph</td>
<td>Student may contact the instructor or department for information.</td>
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Nurs 4800 Nursing Topics
0-16 credit(s), max credits 48, 3 completions allowed;
Instructor: Monsen,Karen A
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 5012 Phillips Neighborhood Clinic: Interprofessional Service
No Grade, 0 credit(s), 10 completions allowed;
Instructor: Rowan,Mary M.
Description: Student may contact the instructor or department for information.

Nurs 5014 Examining the Evidence: Forensic Health Care Practices and Opportunities
2 credit(s);
Instructor: Garcia PhD,Carolyn Marie
Description: Student may contact the instructor or department for information.

Nurs 5016 Critical Reading of Scientific Literature in Adolescent Health
1 credit(s);
Instructor: Sieving,Renee Evangeline
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: 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: Veglia-Young,Carolyn Marie
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Igo,Erin Blackwell
Description: Student may contact the instructor or department for information.

Nurs 5029 Introduction to Nursing Interventions
A-F only, 4 credit(s);
Instructor: Kessler,Penny
Description: Student may contact the instructor or department for information.

Nurs 5030 Foundational Concepts of Professional Nursing
A-F only, 3 credit(s);
Instructor: Cheung,Corjena K
Description: Student may contact the instructor or department for information.

Nurs 5034 Nursing Care of Complex Clients and Diverse Populations
A-F only, 2 credit(s);
Instructor: Krichbaum PhD,Kathleen Elaine
Description: Student may contact the instructor or department for information.

Nurs 5035 Practicum Nursing Care for Complex Health Conditions
A-F only, 4 credit(s);
Instructor: Krichbaum PhD, Kathleen Elaine
Description: Student may contact the instructor or department for information.

Nurs 5035 Practicum 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 5035 Practicum Nursing Care for Complex Health Conditions
A-F only, 4 credit(s);
Instructor: Adwan, Jehad Zaki
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: Duckett, Laura J
Description: An expected outcome of a college education is to become a socially responsible citizen who is aware of complex health problems affecting the global community and who recognizes that professional knowledge and expertise can contribute to resolving these problems. Global health issues, selected by the class, will be examined from an interdisciplinary perspective with emphasis on ethical and cultural sensitivity. Exploration of issues will focus on understanding their complexities. This exploration will help students propose realistic actions that could be taken to resolve these issues. The instructor will use a variety of teaching strategies, including mini-lectures, seminar discussions, and cooperative learning groups. This course meets one of the international perspectives theme requirements.

Nurs 5115 Interprofessional Health Care Informatics
A-F only, 3 credit(s);
Instructor: Monsen, Karen A
Description: Student may contact the instructor or department for information.

Nurs 5116 Consumer Health Informatics
A-F only, 1 credit(s);
Instructor: Austin, Robin R
Description: Student may contact the instructor or department for information.

Nurs 5117 Consumer Health Informatics Practicum
S-N only, 1 credit(s);
Instructor: Austin, Robin R
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 Alesander
Description: Student may contact the instructor or department for information.

Nurs 5228 Pharmacology for Advanced Practice Nursing
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 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 6200 Science of Nursing Intervention
A-F only, 3 credit(s);
Instructor: Peden-McAlpine, Cynthia Jeanne
Description: Student may contact the instructor or department for information.

Nurs 6213 Reproductive Healthcare for Women at Risk
A-F only, 2 credit(s);
Instructor: Drake, Diana M.
Description: Student may contact the instructor or department for information.

Nurs 6214 Reproductive Healthcare for Women at Risk Practicum
S-N only, 2 credit(s);
Instructor: Ruud, Maria Naomi
Description: Student may contact the instructor or department for information.

Nurs 6214 Reproductive Healthcare for Women at Risk Practicum
S-N only, 2 credit(s);
Instructor: Drake, Diana M.
Description: Student may contact the instructor or department for information.

Nurs 6305 Women's Reproductive Health Care
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Ringdahl, Deborah Rene
Description: Student may contact the instructor or department for information.

Nurs 6306 Women's Reproductive Health Practicum
S-N only, 1 credit(s);
Instructor: Ruud, Maria Naomi
Description: Student may contact the instructor or department for information.

Nurs 6306 Women's Reproductive Health Practicum
S-N only, 1 credit(s);
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: Talley, Kristine Marie
Description: Student may contact the instructor or department for information.

Nurs 6408 Advanced Nursing Care of Older Adults Practicum
S-N only, 1 credit(s);
Instructor: Dierich, Mary Therese
Description: Student may contact the instructor or department for information.

Nurs 6408 Advanced Nursing Care of Older Adults Practicum
S-N only, 1 credit(s);
Instructor: Hadidi, Niloufar Niakosari
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: Dierich, Mary Therese
Description: Student may contact the instructor or department for information.

Nurs 6600 Health Systems and Care Models
3 credit(s);
Instructor: Potter PhD, Teddie Michelle
Description: Student may contact the instructor or department for information.

Nurs 6602 PMH Advanced Practice Nursing: Group as a Health Care Intervention
2 credit(s);
Instructor: Kaas, Merrie Jean
Description: Student may contact the instructor or department for information.

Nurs 6603 PMH APN Practicum IV: Group as a Health Care Intervention
2 credit(s);
Instructor: Dillon, Nancy B
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: Pechacek RN, Judith Marie
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: Pechacek RN, Judith Marie
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: McMurray, Roxanne R
Description: Student may contact the instructor or department for information.

Nurs 6914 Basic Nurse Anesthesia Principles Practicum III
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: Friedrich, Cheri L
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: Friedrich, Cheri L
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: Friedrich, Cheri L
Description: Student may contact the instructor or department for information.

Nurs 6930 Foundations of Advanced Public Health Nursing Practice
A-F only, 3 credit(s);
Instructor: Olson Keller, Linda
Description: Student may contact the instructor or department for information.

Nurs 6938 Emergency Preparedness for Public Health Nursing Leaders
A-F only, 2 credit(s);
Instructor: Pfeiffer, Jeanne
Description: Student may contact the instructor or department for information.

Nurs 6939 Public Health Nursing Emergency Preparedness Leadership Practicum
S-N only, 1 credit(s);
Instructor: Pfeiffer, Jeanne
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 7000 DNP Proseminar
1 credit(s);
Instructor: White, Kathryn W
Description: Student may contact the instructor or department for information.
Nurs 7004 Nurse Anesthesia Practicum A
S-N only, 5 credit(s);
Instructor: White, Kathryn W
Description: Student may contact the instructor or department for information.

Nurs 7100 DNP Seminar I
A-F only, 2 credit(s);
Instructor: 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 7102 DNP Seminar III
A-F only, 2 credit(s);
Instructor: Wyman, Jean Frances
Description: Student may contact the instructor or department for information.

Nurs 7108 Population Health Informatics
A-F only, 2 credit(s);
Instructor: Monsen, 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, 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: 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
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Nurs 7110 DNP Project Direction I: Planning
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Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
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S-N only, 1 credit(s);
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Nurs 7110 DNP Project Direction I: Planning
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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);
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Nurs 7110 DNP Project Direction I: Planning
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Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
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Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
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Nurs 7110 DNP Project Direction I: Planning
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Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
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Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
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Nurs 7110 DNP Project Direction I: Planning
S-N only, 1 credit(s);
Instructor: Treat-Jacobson PhD,Diane Jeanette
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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
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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: Sieving, Renee Evangeline  
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Nurs 7110 DNP Project Direction I: Planning  
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Instructor: Mueller, Christine Ann  
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Nurs 7110 DNP Project Direction I: Planning  
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Instructor: Kerr, Madeleine June  
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Nurs 7110 DNP Project Direction I: Planning  
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Nurs 7110 DNP Project Direction I: Planning
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Nurs 7110 DNP Project Direction I: Planning  
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Instructor: McMurray,Roxanne R  
Description: Student may contact the instructor or department for information.

Nurs 7111 DNP Project Direction II: Implementation  
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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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S-N only, 1 credit(s);
Instructor: Steffes, Mary Teresa
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Treat-Jacobson PhD, Diane Jeanette
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Talley, Kristine 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: Hadidi, Niloufar Niakosari
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Drake, Diana M.
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Gaugler PhD, Joseph E
Description: Student may contact the instructor or department for information.
Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Garcia PhD, Carolyn 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: Fagerlund, Kathleen A
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Sieving, Renee Evangeline
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Pechacek RN, Judith 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: Bliss PhD, Donna Zimmaro
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Kubik, Martha Young
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Potter PhD, Teddie Michelle
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Kaas, Merrie Jean
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Adwan, Jehad Zaki
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Peden-McAlpine, Cynthia Jeanne
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Wyman, Jean Frances
Description: Student may contact the instructor or department for information.
Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Mueller, Christine Ann
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Kerr, Madeleine June
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Bronas, Ulf Gunnar
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Monsen, Karen A
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Fjone, Andra Lynn
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: White, Kathryn W
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Looman PhD, Wendy Sue
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Kristofersson, Gisli Kort
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Rhudy, Lori M
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Yu, Fang
Description: Student may contact the instructor or department for information.

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.
Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Pesut, Daniel Joseph
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: McMahon, Siobhan Kathleen
Description: Student may contact the instructor or department for information.

Nurs 7112 DNP Project Direction III: Evaluation
S-N only, 1 credit(s);
Instructor: Saftner, Melissa
Description: Student may contact the instructor or department for information.

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, 1 credit(s);
Instructor: O'Connor-Von PhD, Susan K.
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: O'Connor-Von PhD, Susan K.
Description: Student may contact the instructor or department for information.

Nurs 7300 Program Evaluation
A-F, 3 credit(s);
Instructor: Findorff, Mary Jocelyn
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: Dierich, Mary Therese
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 7516 Health Care of Children for the Family Nurse Practitioner: Acute and Chronic Management
A-F only, 2 credit(s);
Instructor: Benbenek, Mary Mescher
Description: Student may contact the instructor or department for information.

Nurs 7600 Nursing Research and Evidence Based Practice
A-F only, 4 credit(s);
Instructor: Rhudy, Lori M
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 7942 Application of Behavior Change Theory to Population Health Practicum
S-N only, 2 credit(s);
Instructor: Olson Keller, Linda
Description: Student may contact the instructor or department for information.

Nurs 8121 Health Behaviors and Illness Responses
A-F only, 3 credit(s);
Instructor: Gaugler PhD, Joseph E
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: Robertson, Cheryl Lee
Description: Student may contact the instructor or department for information.

Nurs 8177 Advanced Nursing Research Practicum
S-N only, 2 credit(s);
Instructor: Garcia PhD, Carolyn Marie
Description: Student may contact the instructor or department for information.

Nurs 8177 Advanced Nursing Research Practicum
S-N only, 2 credit(s);
Instructor: Bronas, Ulf Gunnar
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 8360 Advanced Clinical Nursing
1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Monsen, Karen A
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: Lindquist, Ruth Ann
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: Findorff, Mary Jocelyn
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: Kaas, Merrie Jean
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 pathways that are important in the maintenance of healthy homeostasis of human body, with a focus on macronutrient metabolism, for the graduate students in Nutrition, Animal Science and other relevant programs. Course Objectives ---To review the biological system of energy metabolism ---To study the chemical/biochemical properties and metabolic pathways of carbohydrate, lipid and protein. ---To learn the regulatory mechanism of macronutrient metabolism and associated signaling pathways. ---To understand the research techniques used in the basic biochemistry and nutritional biochemistry research. ---To evaluate and criticize the experimental approaches and scientific information presented in the research articles related to nutritional biochemistry. Textbooks and Materials? Some of course contents are originated from 3 textbooks below: ---Color Atlas of Biochemistry (2nd Edition) by Koolman and Roehm (Thieme, ISBN 1-58890-247-1) ---Harper’s Illustrated Biochemistry (28th Edition) by Murray, Rodwell, Bender and Botham (McGraw Hill Publishers, ISBN: 978-0-07-162591-3) http://www.accessmedicine.com/resourceTOC.aspx?resourceID=18). ---Advanced Nutrition and Human Metabolism (5th Edition) by Gropper, Smith and Groff (Wadsworth Cengage Learning, ISBN-13: 978-0-495-11657-8) ? Handouts, references and reading assignments will be posted at the Moodle site after the lecture.

Nutr 8620 Advances in Nutrition
2 credit(s);
Instructor: Kotz PhD, Catherine M
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: McGee, Corey Weston
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: Jones, Terrianne Thielen  
Description: Student may contact the instructor or department for information.

OT 6113 Occupational Therapy Process for Community  
A-F only, 3 credit(s);  
Instructor: Iyer, Meenakshi B  
Description: Student may contact the instructor or department for information.

OT 6200 Public and Professional Engagement II  
S-N only, 0.5 credit(s), max credits 1.5, 3 completions allowed;  
Instructor: Bourland, Christina H  
Description: Student may contact the instructor or department for information.

OT 6402 Occupational Therapy Process for Individuals: Occupation Through Neurorehabilitative Approaches  
A-F only, 4 credit(s);  
Instructor: Schaber PhD, Patricia Louise  
Description: Student may contact the instructor or department for information.

OT 6403 Management of Occupational Therapy Services  
A-F only, 1 credit(s);  
Instructor: Bourland, Christina H  
Description: Student may contact the instructor or department for information.

OT 6412 Occupational Therapy Process for Individuals: Orthotics and Prosthetics  
A-F only, 3 credit(s);  
Instructor: McGee, Corey Weston  
Description: Student may contact the instructor or department for information.

OT 6422 Occupational Therapy Process: Group Context  
A-F only, 2 credit(s);  
Instructor: Schaber PhD, Patricia Louise  
Description: Student may contact the instructor or department for information.

OT 6432 Occupational Therapy Process for Individuals: Educational Context  
A-F only, 2 credit(s);  
Instructor: Shore, Leann M  
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, Terri Anne 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: Potegal, Michael
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 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: Bourland, Christina H
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: Bourland, Christina H
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, 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.

Office of Undergraduate Education
220 Morrill Hall

OUE 1086 The First Year Experience
A-F only, 2 credit(s);
Instructor: Young PhD, Julie L
Description: Student may contact the instructor or department for information.

OUE 2100 Academic Planning and Exploration
1 credit(s);
Instructor: Reile, Lucy
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 3050 Introduction to Peer Education
1 credit(s);
Instructor: Williams, Lynell R
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: Goose, Michelle Renae
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: Goose, Michelle Renae
Description: Student may contact the instructor or department for information.

Ojib 3127 Ojibwe Language for Teachers
A-F only, 3 credit(s);
Instructor: Goose, Michelle Renae
Description: Student may contact the instructor or department for information.

Ojib 4101 Beginning Ojibwe I
3 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: OJIB 1101;
Instructor: Goose, Michelle Renae
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: Goose, Michelle Renae
Description: Student may contact the instructor or department for information.

Ojib 5106 Advanced Ojibwe Language I
A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Fairbanks, Brendan George
Description: Student may contact the instructor or department for information.

Oral Biology 15-209 MoosT

OBio 5001 Methods in Research and Writing
2 credit(s);
Instructor: Rudney, Joel David
Description: Student may contact the instructor or department for information.

OBio 8026 Salivary Glands and Secretions
A-F only, 2 credit(s);
Instructor: Rudney, Joel David
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.

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.
Office of the Registrar

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.

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.

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.

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.

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.

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); [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101 Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Christopherson, Christen Ruth
Description: This introductory level course presents leadership using a personal leadership perspective and framework. 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 effective leadership and learn about the importance of personal development.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101 Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Porter II, Louis
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101 Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Reile, Lucy
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); [added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101 Credit will not be granted if credit has been received for: PA 1961W; 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); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Thomas-Card, Traci Lee
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Lahr, Lindsey Elizabeth
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Marcy, Ben
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; 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); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Larson, Amanda A
Description: This introductory level course presents leadership using a personal leadership perspective and framework. 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 effective leadership, and learn about the importance of personal development.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Digby PhD, Cynthia LB
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); credit will not be granted if credit already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101
Credit will not be granted if credit has been received for: PA 1961W; Meets CLE req of Writing Intensive
Instructor: Digby PhD, Cynthia LB
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.
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OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);[added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit
already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101Credit will not be granted if credit
has been received for: PA 1961W;Meets CLE req of Writing Intensive
Instructor: Shelley, Laura Catherine
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);[added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit
already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101Credit will not be granted if credit
has been received for: PA 1961W;Meets CLE req of Writing Intensive
Instructor: Chung, Jessica
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);[added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit
already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101Credit will not be granted if credit
has been received for: PA 1961W;Meets CLE req of Writing Intensive
Instructor: McManimon, Shannon
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);[added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit
already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101Credit will not be granted if credit
has been received for: PA 1961W;Meets CLE req of Writing Intensive
Instructor: Heineman, Colby
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);[added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit
already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101Credit will not be granted if credit
has been received for: PA 1961W;Meets CLE req of Writing Intensive
Instructor: Johnson, Brianne M
Description: Student may contact the instructor or department for information.

OLPD 1301W Personal Leadership in the University
A-F only, 3 credit(s);[added to PS note field, course notes sequence nbr 3:] credit will not be granted if credit
already received for: EdPA 1301W/EdPA 1302/PA 1961W/CFAN 3480/CFAN 1101Credit will not be granted if credit
has been received for: PA 1961W;Meets CLE req of Writing Intensive
Instructor: Routman, Sarah Lynn
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 1301WCredit will
not be granted if credit has been received for: PA 1961W;
Instructor: Mohajeri, Orkideh
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: Hoffman, Garrett Drew
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: Rodriguez Jr, Fernando
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: Fitzgerald-Sisk, Meg
Description: This course looks specifically at the world of work, and examines possible changes in that arena, including the role of advancing technology in respect to its impact on the labor force; the role of robotics in particular, with respect to its potential impacts on skilled manual labor; and the potential effects of artificial intelligence on the most advanced professional activities currently undertaken by humans in both advanced and developing societies. The primary technique the course uses for this purpose is guided short story and scenario constructions. Upon completion of the course, students will be able to: ? Understand what liberal education is, with a particular focus on technologies of the future and work of the future, and understand what this means for them as students and as citizens; ? Describe the rapidly evolving social (economic, political, cultural and technological) circumstances within which work changes, and explore the ethical aspects of these possible changes; ? Connect knowledge and practice when explaining the study of the future as a trans-disciplinary field, a professional field, and a highly customizable intellectual technology; ? Consider the impact of technology from multiple perspectives that include developers, users/consumers, as well as others in society; ? Discuss the history of human societies, with particular emphasis upon technological evolution and implications for the world of work. ? Emphasize the importance of alternative perspectives when considering future social contexts and associated work patterns, and develop skills in constructing a framework for evaluating conflicting views of exiting or emerging technologies; ? Describe the explosive development of human capital, and the risks of institutional lag; ? Explain how future-oriented personal development can contribute to improved organizational effectiveness in the face of change; and ? Discuss the selective personalization of proactive responses to forces shaping human capital developing in the 21st century. Style: 15% Lecture, 15% Film/Video, 30% Discussion, 35% Small Group Activities, 5% Guest Speakers. Grading: 65% reports/papers, 15% attendance, 20% class participation. Participation is documented through the use of in-class clicker technology, as well as through discussion participation in small and large groups.

OLPD 2811H Societies of the Future: Changing Work Contexts, Honors
A-F only, 3 credit(s); Meets CLE req of Technology and Society
Instructor: Fitzgerald-Sisk, Meg
Description: Student may contact the instructor or department for information.

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
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 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
Credit will not be granted if credit has been received for: PA 3971;
Instructor: Ve Lure Roholt, Christine Elizabeth
Description: Student may contact the instructor or department for information.

OLPD 3306 Leadership Minor: Field Experience
A-F only, 3 credit(s); 3302 with grade of at least C credit will not be granted if credit already received for: EdPA
Credit will not be granted if credit has been received for: PA 3971;
Instructor: Frazzini, Ronald Michael
Description: Student may contact the instructor or department for information.

OLPD 3306 Leadership Minor: Field Experience
A-F only, 3 credit(s); 3302 with grade of at least C credit will not be granted if credit already received for: EdPA
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: 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: 10% Lecture, 5% Film/Video, 40% Discussion, 35% Small Group Activities, 5% Student Presentation, 5% Guest Speakers.
Grading: 25% mid exam, 25% final exam, 25% special projects, 10% attendance, 15% class participation.

OLPD 3380 Developing Intercultural Competence
A-F only, 3 credit(s);
Instructor: Winters, Kelly T
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 3493 Directed Study in Business & Marketing Education
1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Shelley, Laura Catherine
Description: Student may contact the instructor or department for information.

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: Plachecki, Frank John
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
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: Schill, Jayne Greeney
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
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: Pekol, Amy R
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, 4 completions allowed;
Instructor: Rodriguez Jr, Fernando
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 5041 Sociology of Education
3 credit(s); credit will not be granted if credit already received for: EdPA 5041 Credit will not be granted if credit has been received for: SOC 5455;
Instructor: Seashore, Karen Rose
Description: Structures and processes within educational institutions; linkages between educational organizations and
their social contexts, particularly related to educational change. Focus on issues of race, class and equity, both within the U.S. and internationally.

**Style:** 40% Lecture, 40% Discussion. Student presentations, role plays, movie clips, etc.

**Grading:** 50% reports/papers, 10% in-class presentation, 30% class participation, 10% other evaluation. on-line discussions

**OLPD 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 the Beautiful Forevers: Life, Death, and Hope in a Mumbai Under City by Katherine Boo. There are also additional readings that are part of the course Moodle site.  
**Style:** 40% Lecture, 30% Discussion, field research  
**Grading:** 60% reports/papers, 40% other evaluation. team project  
**Exam Format:** Essay

**OLPD 5080 Special Topics: Organizational Leadership, Policy, & Development: Teacher Led Inquiry**  
1-3 credit(s), max credits 24, 24 completions allowed;  
**Instructor:** Schefers,Oscar Carmody  
**Description:** Student may contact the instructor or department for information.

**OLPD 5087 Seminar: Organizational Leadership, Policy, and Development**  
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: Organizational Leadership, Policy, and Development**  
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: Organizational Leadership, Policy, and Development**  
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:** Shirazi,Roozbeh  
**Description:** Student may contact the instructor or department for information.

**OLPD 5104 Strategies for International Development of Education Systems**
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 take on the responsibility of making and evaluating 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: Arur, Aditi Ashok
Description: Student may contact the instructor or department for information.

OLPD 5132 Intercultural Education and Training: Theory and Application
3 credit(s);
Instructor: Goh PhD, Michael P.
Description: Student may contact the instructor or department for information.

OLPD 5201 Strategies for Teaching Adults
A-F only, 3 credit(s);
Instructor: Park, Rosemarie J
Description: Student may contact the instructor or department for information.

OLPD 5202 Perspectives of Adult Learning and Development
3 credit(s);
Instructor: Twohig, Catherine Carol
Description: Student may contact the instructor or department for information.

OLPD 5211 Introduction to the Undereducated Adult
A-F only, 1 credit(s);
Instructor: Digby PhD, Cynthia LB
Description: 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 5344 School Law
3 credit(s);
Instructor: Forbes, Paula Gail
Description: Student may contact the instructor or department for information.

OLPD 5346 Politics of Education
A-F only, 3 credit(s);
Instructor: Alexander, Nicola
Description: Political dimensions of policy formulation/implementation in education. Use of power/influence in shaping educational policies and in resolving conflicts over educational issues. Analysis of consequences/cross-impacts.

OLPD 5361 Project in Teacher Leadership
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: Schmidt, Chad W
Description: Student may contact the instructor or department for information.

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: Prest, Gary Stephen
Description: Student may contact the instructor or department for information.
OLPD 5396 Field Experience in PK-12 Administration: Authentic Practice in Leadership  
S-N only, 3 credit(s), max credits 12, 4 completions allowed;  
Instructor: Scearcy, Lynn R  
Description: Student may contact the instructor or department for information.

OLPD 5501 Principles and Methods of Evaluation  
3 credit(s); credit will not be granted if credit already received for: EdPA 5501; Credit will not be granted if credit has been received for: EPSY 5243;  
Instructor: STAFF  
Description: Student may contact the instructor or department for information.

OLPD 5502 Theory and Models of Evaluation  
3 credit(s);  
Instructor: Zimmer, Jeanne Felicity  
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 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: Christesen, David Allen  
Description: This course provides an overview of organization development theories and practices. Organizational Development (OD) is a conscious, planned process of developing an organization's capabilities so that it can attain and sustain an optimal level of performance as measured by efficiency, effectiveness, and health. Through the process of OD, we attempt to bring about successful change efforts in individual employees, groups and teams, inter-groups, and organizations. At any of these levels of analysis, when we use the process of OD we are essentially asking: -Where are we? -Where do we want to be? -How do we get from where we are to where we want to be? To achieve a competitive advantage globally, contemporary organizations are in a continuous state of change. Within such a complex system as an organization, change has a rippling effect. For instance, technological innovation is not limited to hardware and software. It has an impact, sometimes quite dramatic, economically, politically, socially, legally, organizationally, and even personally. Given the magnitude of change taking place at the beginning of the 21st century, it is important for HR, OB, and Evaluation professionals to examine the theories and models, and methods and processes related to organizational change. In this course, we will focus on those methods, interventions, models, and processes specifically related to diagnosing and planning for organizational change.

OLPD 5611 Facilitation and Meeting Skills  
1 credit(s);  
Instructor: Mathews, Melissa  
Description: Student may contact the instructor or department for information.

OLPD 5619 Planning and Decision-Making Skills  
1 credit(s);  
Instructor: Mathews, Melissa  
Description: Student may contact the instructor or department for information.

OLPD 5670 Special Topics in Human Resource Development: Consulting skills for Organization Change  
3 credit(s), max credits 24, 24 completions allowed;  
Instructor: Christesen, David Allen  
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: 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: Miksch, Karen L
Description: Student may contact the instructor or department for information.

OLPD 5704 College Students Today
3 credit(s); credit will not be granted if credit already received for: EdPA 5704Credit will not be granted if credit has been received for: EPSY 5451;
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 5601Credit will not be granted if credit has been received for: HRD 5601;
Instructor: Wegener, Inger
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: Schill, Jayne Greeney
Description: Student may contact the instructor or department for information.
OLPD 5893 Directed Study in OLPD
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: Quast, Louis Neumann
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 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 8002 Critical Issues in Contemporary Education
3 credit(s);
Instructor: Magnusson PhD, Deanne L.
Description: Student may contact the instructor or department for information.

OLPD 8011 Doctoral Research Seminar I
S-N only, 1 credit(s);
Instructor: Ropers-Huilman, Rebecca
Description: Student may contact the instructor or department for information.

OLPD 8012 Doctoral Research Seminar II
S-N only, 1 credit(s);
Instructor: Magnusson PhD, Deanne L.
OLPD 8022 Education and Globalization: Anthropological Perspectives  
A-F only, 3 credit(s);  
Instructor: Shirazi, Roozbeh  
Description: Student may contact the instructor or department for information.

OLPD 8087 Seminar: Organizational Leadership, Policy, and Development  
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: Organizational Leadership, Policy, and Development  
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 8121 Doctoral Seminar: Comparative and International Development Education  
S-N only, 1-6 credit(s), max credits 6, 4 completions allowed;  
Instructor: Vavrus, Frances  
Description: Student may contact the instructor or department for information.

OLPD 8302 Educational Policy Perspectives  
3 credit(s);  
Instructor: Alexander, Nicola  
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: Haynes, Melissa  
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 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.

Orthodontics  15-209 MoosT

Otho 7102 Growth & Development  
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Beyer, John Paul  
Description: Student may contact the instructor or department for information.

Otho 7112 Diagnosis & Treatment Planning  
A-F only, 0-5 credit(s), max credits 5, 1 completion allowed;  
Instructor: Vayda, Patricia Macchiariul  
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 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.

Persian  220 Folwell Hall

Pers 1011 Beginning Persian I
4 credit(s); Credit will not be granted if credit has been received for: PERS 4101;
Instructor: STAFF
Description: This course serves as an introduction to the Persian language and culture; thus, no previous knowledge of the language is required. We will learn to communicate by speaking, listening, reading, and writing in Persian. Persian will be the primary language of the class with limited use of English. Although it is challenging to learn the target language without having words translated into English, context, visual aids, hand gestures, and body language will be used to guide students in their learning process. Students should expect to participate in small group or pair work activities. Questions or concerns that require extensive use of English may be addressed outside of class or during office hours. This course will be broadcast in from the University of Wisconsin - Madison.

Pharmaceutics  9-177 Weaver-Densford Hall

Phm 8100 Seminar: Pharmaceutics
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Kandimalla, Karunya K
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: Wiedmann, Timothy Scott
Description: Student may contact the instructor or department for information.

Phm 8120 Readings in Central Nervous System (CNS) Drug Delivery
S-N only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Fairbanks, Carolyn Ann
Description: Student may contact the instructor or department for information.

Phm 8150 Pharmacokinetics Research Seminar
S-N only, 1 credit(s), max credits 12, 12 completions allowed; Grad Phm major Credit will not be granted if credit has been received for: PHAR 6223;
Instructor: Elmquist, William Frederick
Description: Student may contact the instructor or department for information.

Phm 8481 Advanced Neuropharmaceutics
A-F only, 4 credit(s); instr consent Credit will not be granted if credit has been received for: CMB 8481;
Instructor: Fairbanks, Carolyn Ann
Description: Student may contact the instructor or department for information.

Pharmacology  6-120 Jackson Hall

Phcl 2001 Basic Principles of Pharmacology: A Drug's Fantastic Voyage
A-F only, 2 credit(s);
Instructor: Connell, Gregory James
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 4100 Laboratory in Molecular Pharmacology
A-F only, 2 credit(s);
Instructor: Romero, Daniel Patrick
Description: Student may contact the instructor or department for information.

Phcl 4343 Pharmacology of the Synapse
A-F only, 2 credit(s);
Instructor: Petersen, Christina Ingrid
Description: Student may contact the instructor or department for information.

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: Marchant, Jonathan S
Description: Student may contact the instructor or department for information.

Phcl 8026 Neuro-Immune Interactions
3 credit(s);
Instructor: Molitor, Thomas William
Description: Student may contact the instructor or department for information.

Phcl 8100 Laboratory Research in Pharmacology
S-N only, 4 credit(s), max credits 8;
Instructor: Campbell, Colin R
Description: Student may contact the instructor or department for information.

Phcl 8200 Seminar: Selected Topics in Pharmacology
A-F only, 1 credit(s), max credits 8, 8 completions allowed;
Instructor: Walseth, Timothy F
Description: Student may contact the instructor or department for information.

Phcl 8208 Neuropsychopharmacology
A-F only, 3 credit(s);
Instructor: Roy, Sabita
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 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: You may know that pharmacists are responsible for the dispensation of medications, but did you know that pharmacists actually play a critical role in the healthcare process by ensuring that their patients receive the best overall care? Designed to help you better understand the world of pharmacy, this online pharmacy course will introduce you to this exciting profession and help you gain an understanding of the profound impact of the pharmacist in the patient care process. This course examines what training is necessary for success in the pharmacy field, demonstrates the roles a pharmacist can have in patient care, research and academia, and provides virtual tours of various settings in which pharmacists work. 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. 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 phar1001@umn.edu.
Style: 100% Web Based.

Phar 1002 Medical Terminology
2 credit(s);
Instructor: Lounsbery, Jody Leigh
**Phar 1003 Non-Prescription Medications and Self-Care: Treating Minor Conditions**

*2 credit(s);*

**Instructor:** Milone PharmD, Anna S

**Description:** Nonprescription medications and dietary supplements 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, methods of birth control, and the use of dietary supplements for weight loss. 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. For more information, contact phar1003@umn.edu.

**Style:** 100% Web Based.

**Exam Format:** Multiple Choice

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**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. For more information, contact phar1004@umn.edu or 612-624 7976

**Style:** 100% Web Based.

**Exam Format:** Multiple Choice

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**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.

**Exam Format:** Multiple Choice

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**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...
Phar 3207 Leadership in Health Care  
A-F only, 3 credit(s); The Twin Cities online Phar 3207 and 5207 are equivalent to the online Duluth Phar 3207 and 5207 and credit will not be granted if credit has been received for more than one instance of the courses. Credit will not be granted if credit has been received for: PHAR 5207;  
Instructor: Fierke, Kerry K.  
Description: 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: Cortese PharmD, Angela Marie  
Description: This course is entirely online and is designed for pre-health professional students to prepare for more in-depth courses. Although there are no formal prerequisites, we assume you have had one year of college-level biology and general chemistry as well as basic human anatomy or equivalent experience. We will cover basic physiology of the human body including homeostasis, fluid balance and major organ systems. A simulated laboratory experience is included as part of this course. For more information, contact phar3601@umn.edu  
Style: 100% Web Based.  
Grading: A-F only  
Exam Format: multiple choice and T/F

Phar 3700 Fundamentals of Pharmacotherapy  
A-F only, 3 credit(s); Medical terminology  
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. For more information, contact phar3700@umn.edu or 612-624 7976  
Style: 100% Web Based.  
Exam Format: Multiple Choice

Phar 3800 Pharmacotherapy for the Health Professions  
A-F only, 3 credit(s); Anatomy/physiology, nursing or respiratory care  
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 prerequisites for each health professional program.) There is no textbook for this course. Students use Moodle to: view audio-narrated power-point 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 phar3800@umn.edu.  
Style: 100% Web Based.  
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 ssemi-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 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 5200 Drugs and the U.S. Health Care System  
A-F only, 3 credit(s); grad or professional studentCredit 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: Lounsbery,Jody Leigh  
Description: Prerequisites: None. This course assumes you have background knowledge of human anatomy/physiology. This course will help you recognize medical abbreviations, relate terms to procedures and diagnostics, comprehend the meaning of medical terminology by using word elements, and apply medical terms in the context of patient care. Communication related to disease states, procedures, and diagnostics in healthcare can sometimes seem like another language. During this course, you will not only increase your medical vocabulary by more than 2500 words in a self-paced manner, you will also learn to identify and articulately describe a wide variety of medical conditions and processes. This is a completely online, self-paced course. Students may complete the course before the end date of the term. For more information, contact phar5201@umn.edu or 612-624-7976.  
Style: 100% Web Based.  
Exam Format: Multiple Choice

Phar 5205 Obesity: Issues, Interventions, Innovations  
A-F only, 2 credit(s);  
Instructor: Milone PharmD, Anna S  
Description: In this course, we will focus on the role of the pharmacist in treating obesity. We?ll learn the pharmacology of past and current medications to treat obesity, as well as discuss the pathophysiology of the disease to understand why more options aren?t available. Students will explore drug information sources for dietary supplements for weight loss and create presentations for the class. We?ll discuss the care of an obese patient including non-pharmacologic treatments for obesity, as well as recognizing the potential for bias and its effect on patient care. Finally, we?ll look at bariatric surgery and discuss some specific adjustments in care for bariatric patients. For more information, contact phar5205@umn.edu or 612-624-7976  
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 Applied Leadership in Health Care
A-F only, 3 credit(s); advanced undergraduates or professional health care students or 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. For more information, contact phar3700@umn.edu.
Style: 100% Web Based.
Exam Format: Multiple Choice

Phar 5800 Pharmacotherapy for the Health Professions
A-F only, 3 credit(s); Nursing grad program Credit will not be granted if credit has been received for: PHAR 3800;
Instructor: Cortese PharmD, Angela Marie
Description: Introduction to drug therapy. Medication safety, medication administration. Monitoring medication use.

PhD 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.

PhD 5207 Applied Leadership in Health Care
A-F only, 3 credit(s); advanced undergraduates or professional health care students or 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

PhD 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. For more information, contact phar3700@umn.edu.
Style: 100% Web Based.
Exam Format: Multiple Choice

PhD 5800 Pharmacotherapy for the Health Professions
A-F only, 3 credit(s); Nursing grad program Credit will not be granted if credit has been received for: PHAR 3800;
Instructor: Cortese PharmD, Angela Marie
Description: Introduction to drug therapy. Medication safety, medication administration. Monitoring medication use.

Philosophy 831 Heller Hall

Phil 1001 Introduction to Logic
4 credit(s); Credit will not be granted if credit has been received for: PHIL 1001H; Meets CLE req of Mathematical Thinking
Instructor: Hammer, Carl Joseph
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: Cook, Roy Thomas  
Description: This course will present a historically motivated introduction to philosophy in three parts. The first part will concentrate on philosophy in the ancient world, focusing on Plato's "Republic". The second section of the course will concentrate on important trends that developed in the Seventeenth Century, and our primary readings will be from Rene Descartes "Meditations on First Philosophy". Finally, we will examine a number of paradoxes, and our target here will be determining how these puzzles motivated and shaped philosophical thought throughout history.  
Style: 75% Lecture, 25% Discussion.  
Grading: 30% reports/papers, 60% additional semester exams, 10% class participation.

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: Powers, John D  
Description: Student may contact the instructor or department for information.

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, 70% reports/papers, 5% class participation.  
Exam Format: In class, essay exam.

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: Rosaler, Joshua Samuel  
Description: Student may contact the instructor or department for information.

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

Phil 1007 Introduction to Political Philosophy Practicum  
1 credit(s);  
Instructor: Holtman, Sarah Williams  
Description: This optional one-credit practicum allows students in Phil 1004W to relate the political philosophy studied in that course to practical issues. Students complete 26 hours of volunteer work with organizations in the U of M neighborhood (e.g., Pratt Community School or East Side Neighborhood Service's Luxton Learners after school program at Luxton Park). Students meet with Prof. Holtman for three 45 minute discussion sessions and write three short reflection papers relating their volunteer work to the political theories taken up in Phil 1004W. Students may substitute this work for the final exam in Phil 1004W.

Phil 1905 Topics: Freshman Seminar: What It Is to be a Person  
A-F only, 3 credit(s), max credits 6;  
Instructor: Tiberius, Valerie  
Description: Student may contact the instructor or department for information.

Phil 1905 Topics: Freshman Seminar: What It Is to be a Person  
A-F only, 3 credit(s), max credits 6;  
Instructor: Koenig, Melissa  
Description: Student may contact the instructor or department for information.
Phil 1910W Topics: Freshman Seminar: What's So Great About Classical Music?
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kac, Michael B
**Description:** Despite what you may have heard, classical music isn't just a dry, arid landscape of interest only to culture snobs. The great masterpieces are supreme products of the human imagination touching on all aspects of the human condition – comic, tragic, sacred, profane. This is music that has moved generations of listeners to laughter and to tears, while at the same time inviting them to contemplate and reflect on its inner order and architectural grandeur. This seminar will present some of the great works of the classical tradition along with an explanation of what makes them so remarkable. No prior knowledge about music is required -- just bring an open mind.

Phil 3001W General History of Western Philosophy: Ancient Period
4 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Peterson, Sandra Lynne
**Description:** The course will study the beginnings of philosophy in the Western world. The ancient Greek philosophers to be studied include Heraclitus, Parmenides, Gorgias, Socrates, Plato, Aristotle, Sextus Empiricus, and Epictetus. 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 of the surviving remnants of the writings of the PreSocratics, several dialogues of Plato's, selections from Aristotle's writings, Sextus Empiricus 'Outlines of Scepticism', and Epictetus 'Handbook'.
**Style:** 5% Lecture, 95% Discussion.
**Grading:** 80% reports/papers, 20% class participation.

Phil 3231 Philosophy and Language
4 credit(s);
**Instructor:** Owens, Joseph I
**Description:** Student may contact the instructor or department for information.

Phil 3234 Knowledge and Society
4 credit(s);
**Instructor:** Brito, Marisol
**Description:** Student may contact the instructor or department for information.

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; ecosabotage; 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: Mason, Michelle N
**Description:** Among the moral questions that confront us over the course of a lifetime, some have broad social significance. The answers to many of these moral questions, moreover, are a source of often intense public debate. Is race-based affirmative action unfair? Should marriage be limited to heterosexual couples? What moral consideration, if any, do we owe to nonhuman animals? What is my responsibility, if any, for helping alleviate global warming? Is abortion morally permissible and, if so, until what stage of a pregnancy? Does capital punishment perpetuate racial injustices? Is it morally wrong otherwise? Is the conduct of a just war possible? Might torture be a morally permissible means in the conduct of
such a war? Given the significance of such questions and the lack of agreement on their answers, it is especially important that we think clearly and argue cogently for our own positions on the matters. In this course, our goal will be to gain competence in interpreting and assessing philosophical arguments and to bring that competence to bear on our own answers to some of these controversial moral issues. Majors and non-majors welcome.

**Style:** 60% Lecture, 30% Discussion, 10% Web Based.
**Grading:** 20% mid exam, 30% final exam, 30% reports/papers, 20% class participation.
**Exam Format:** multiple choice, short answer

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**Phil 3305 Medical Ethics**
- 4 credit(s);
- **Instructor:** Kringle,Kirsten
- **Description:** Student may contact the instructor or department for information.

**Phil 3311W Introduction to Ethical Theory**
- 4 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Stoner,Ian M
- **Description:** Student may contact the instructor or department for information.

**Phil 3601W Scientific Thought**
- 4 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Uffink,Jos
- **Description:** Student may contact the instructor or department for information.

**Phil 3602 Science, Technology, and Society**
- A-F only, 3 credit(s);
- **Instructor:** Rosaler,Joshua Samuel
- **Description:** Student may contact the instructor or department for information.

**Phil 3993 Directed Studies**
- 1-3 credit(s), max credits 6, 6 completions allowed;
- **Instructor:** STAFF
- **Description:** Students may contact the instructor or department for information.

**Phil 4010 Ancient Philosophers**
- 3 credit(s), max credits 6;
- **Instructor:** Peterson,Sandra Lynne
- **Description:** Philosophy 4010 Fall 2014 This course will study Plato?s most famous work, the Republic. Among the questions that this controversial dialogue provokes are these: Was Plato a pessimist about human nature who was advocating a totalitarian state? Was he advocating a meritocracy where the best and the brightest ruled to make the lives of others as good as they could be? Was he reducing to absurdity a plan for a state whose citizens wanted luxury and needed an efficient military force to compete for the territory that made the luxurious life possible? Or was Plato simply depicting Socrates revealing the characters of his interlocutors by using the strategy of getting their reaction to his proposals about how to create a state from the beginning? If so, why would Socrates, as depicted, do that? Class discussion will give students the opportunity to answer these questions and to arrive at their own interpretations of the dialogue.
- **Style:** 10% Lecture, 90% Discussion.
- **Grading:** 10% quizzes, 25% attendance, 65% reflection paper.

**Phil 4105W Epistemology**
- A-F only, 3 credit(s); Meets CLE req of Writing Intensive
- **Instructor:** Scheman,Naomi
- **Description:** Student may contact the instructor or department for information.

**Phil 4320W Intensive Study of an Historical Moral Theory**
- 3 credit(s), max credits 6; Meets CLE req of Writing Intensive
- **Instructor:** Holtman,Sarah Williams
- **Description:** This fall the focus of Phil. 4320 will be on Immanuel Kant's moral and political theory. Using works including the "Groundwork of the Metaphysics of Morals" and the "Critique of Practical Reason," as well as selections on justice and virtue, we will address Kant's meta-ethical and normative views and consider the application of Kantian principles to contemporary issues.
- **Style:** 60% Lecture, 40% Discussion.
Grading: 30% final exam, 60% reports/papers, 10% other evaluation.
Exam Format: essay

Phil 4501 Principles of Aesthetics
3 credit(s);
Instructor: Cook, Roy Thomas
Description: Student may contact the instructor or department for information.

Phil 4605 Space and Time
3 credit(s);
Courses in [philosophy or physics] or instr consent
Credit will not be granted if credit has been received for: PHIL 5605;
Instructor: Uffink, Jos
Description: Student may contact the instructor or department for information.

Phil 4622 Philosophy and Feminist Theory
3 credit(s);
8 crs in [philosophy or women's studies] or instr consent
Credit will not be granted if credit has been received for: GWSS 4122;
Instructor: Scheman, Naomi
Description: This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of "post-positivist realism," critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970’s had provided a central example for a 1993 paper of Satya Mohanty's that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.
Style: 40% Lecture, 60% Discussion.
Grading: 55% reports/papers, 45% reflection paper. web and in-class participation can improve one's grade
Exam Format: N/A

Phil 4993 Directed Studies
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phil 4995 Senior Project (Directed Studies)
A-F only, 1 credit(s);
Instructor: 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 5010 Ancient Philosophers
3 credit(s), max credits 6;
Instructor: Peterson, Sandra Lynne
Description: Philosophy 4010 Fall 2014 This course will study Plato’s most famous work, the Republic. Among the questions that this controversial dialogue provokes are these: Was Plato a pessimist about human nature who was advocating a totalitarian state? Was he advocating a meritocracy where the best and the brightest ruled to make the lives of others as good as they could be? Was he reducing to absurdity a plan for a state whose citizens wanted luxury and needed an efficient military force to compete for the territory that made the luxurious life possible? Or was Plato simply depicting Socrates revealing the characters of his interlocutors by using the strategy of getting their reaction to his proposals about how to create a state from the beginning? If so, why would Socrates, as depicted, do that? Class discussion will give students the opportunity to answer these questions and to arrive at their own interpretations of the dialogue.
Style: 10% Lecture, 90% Discussion.
Grading: 10% quizzes, 25% attendance, 65% reflection paper.
Phil 5201 Symbolic Logic I
4 credit(s);
Instructor: Taylor, David Ernest
Description: Student may contact the instructor or department for information.

Phil 5605 Space and Time
3 credit(s); Courses in [philosophy or physics] or instr consent
Credit will not be granted if credit has been received for: PHIL 4605;
Instructor: Uffink, Jos
Description: Student may contact the instructor or department for information.

Phil 5622 Philosophy and Feminist Theory
3 credit(s); 8 crs in [philosophy or women's studies] or instr consent
Credit will not be granted if credit has been received for: PHIL 4622;
Instructor: Scheman, Naomi
Description: This course explores questions of realism and objectivity, specifically concerning identity, by bringing together three (overlapping) lines of theorizing: work in literary theory under the heading of "post-positivist realism," critical race theory, and Wittgensteinian feminist theory. The genesis for the course was my discovery that a paper of mine from the 1970's had provided a central example for a 1993 paper of Satya Mohanty's that is the germinal work in post-positivist realism. A 2000 collection of papers articulating that position is one of the core texts for our class, along with some of the work that (totally independently) I have been doing in the 30 years since my original paper, and some of the work (in philosophy and critical race theory) that has influenced me. My hope is that this triangulation will shed light on a central issue in philosophy and feminist theory, namely, how to make sense of truth claims (especially those that seem to be needed for effective political critique and activism) without appeal to problematically foundationalist metaphysics and epistemology.
Style: 40% Lecture, 60% Discussion.
Grading: 55% reports/papers, 45% reflection paper. Web and in-class participation can improve one's grade
Exam Format: N/A

Phil 5993 Directed Studies
1-3 credit(s), max credits 6, 6 completions allowed;
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phil 8180 Seminar: Philosophy of Language
3 credit(s), max credits 6;
Instructor: Hanks, Peter William
Description: This will actually be a seminar on the philosophy of perception. After surveying the major views in philosophy of perception, we will focus on issues about the contents of perceptual experiences. Do perceptual experiences have contents? What does that even mean? What are these contents like? Are they propositions? What would it be for a perceptual experience to have propositional content? I have some ideas about how to answer these questions that grows out of previous work in philosophy of language.

Phil 8620 Seminar: Philosophy of the Biological Sciences
3 credit(s), max credits 6;
Instructor: Love, Alan C
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: Couillard, Jessica Novotny
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 1014 Conditioning
  OPT No Aud, 1 credit(s);
  Instructor: Brandes, Megan Ann
  Description: Student may contact the instructor or department for information.

PE 1014 Conditioning
  OPT No Aud, 1 credit(s);
  Instructor: Mork, Sarah Katelyn
  Description: Student may contact the instructor or department for information.

PE 1014 Conditioning
  OPT No Aud, 1 credit(s);
  Instructor: Munafo, Justin Gabriel
  Description: Student may contact the instructor or department for information.

PE 1015 Weight Training
  OPT No Aud, 1 credit(s);
  Instructor: Munafo, Justin Gabriel
  Description: Student may contact the instructor or department for information.

PE 1015 Weight Training
  OPT No Aud, 1 credit(s);
  Instructor: Stephenson, Greg
  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: Yeo, Dongwook
  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 1045 Rock Climbing
  OPT No Aud, 1 credit(s);
  Instructor: Elverson, Charles Todd
  Description: Student may contact the instructor or department for information.

PE 1045 Rock Climbing
  OPT No Aud, 1 credit(s);
  Instructor: Heimer, Katie Allison
  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: Hoffmann, Tiffany
   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 1076 Flag Football
   OPT No Aud, 1 credit(s);
   Instructor: Townzen, Ryan Karim
   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 1079 Rugby (Non-contact)
   OPT No Aud, 1 credit(s);
   Instructor: STAFF
   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: Wood, Martha L
   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: Picard, Kathleen Marie
   Description: Student may contact the instructor or department for information.

PT 6220 Clinic Volunteer
   No Grade, 1 credit(s), max credits 6, 6 completions allowed;
   Instructor: Anderson, Kathleen
   Description: Student may contact the instructor or department for information.

PT 6231 Clinical Biomechanics
   A-F only, 5 credit(s); Intro calculus, physics, registered PT student
   Credit will not be granted if credit has been received for: PMED 5231;
   Instructor: Ludewig, Paula M
   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: Koehler, Linda Ann
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: Van de Winckel, Ann Liesbeth Jeanne
Description: Student may contact the instructor or department for information.

PT 6295 Clinical Internship I
S-N only, 10 credit(s);
Instructor: Olson-Kellogg, Becky Jo
Description: Student may contact the instructor or department for information.

PT 6296 Clinical Internship II
S-N only, 10 credit(s);
Instructor: Olson-Kellogg, Becky Jo
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: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I
S-N only, 1 credit(s);
Instructor: Lojovich, Jeanne Marie
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I
S-N only, 1 credit(s);
Instructor: Kimberley, PT, PhD, Teresa Jacobson
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I
S-N only, 1 credit(s);
Instructor: 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: 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: MacKinnon, Colum
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I
S-N only, 1 credit(s);
Instructor: Van de Winckel, Ann Liesbeth Jeanne
Description: Student may contact the instructor or department for information.

PT 8131 Research Seminar I
S-N only, 1 credit(s);
Instructor: Legon, Wynn
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: Koehler,Linda Ann
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Thompson PhD,LaDora V
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Ludewig,Paula M
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Lowe,Dawn Annette
Description: Student may contact the instructor or department for information.

PT 8193 Research Problems in Physical Therapy
A-F only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: Glasoe,Ward 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: Gillick,Bernadette Therese
Description: Student may contact the instructor or department for information.

**Physics** 148 *Tate Laboratory of Physics*

**Phys 1001W Energy and the Environment**
4 credit(s); Meets CLE req of Environment; meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This course addresses current issues of the relationship between energy use and the environment by starting with the fundamental physics principles of force and energy, and demonstrating how these concepts apply to Electricity and Magnetism, Thermodynamics, Chemical Physics and Nuclear Power generation. These principles are applied to specific applications by examining topics such as power production, acid rain and fuel resources. The consequences of fundamental physics on public policy will also be discussed in this context. Math skills at the level of high school algebra are assumed. The accompanying laboratory is a series of short experiments which illustrate the concepts as they are presented in class.

**Phys 1011 Physical World**
A-F only, 3 credit(s);
Instructor: Cassola,Robert L
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The underlying purpose of this course is to provide you with a firm, elementary understanding of the principles of physics. The material covered in this course is fundamental and forms the basis for virtually all future courses in physics and engineering. It is hoped that as you proceed through this course, you will not only gain some facility in applying the concepts of physics to problems of practical interest, but that you will also gain an awareness of, and an appreciation for, the unifying principles on which physics is based.
Style: This is a printed correspondence section.
Grading: 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: Border, Pete Mac
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, algebraCredit 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 Phys 1201W. 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
Phys 1251 Physics I
A-F only, 4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Technology and Society
Instructor: Aanerud, Marian Elaine Melby
Description: Student may contact the instructor or department for information.

Phys 1251 Physics I
A-F only, 4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Technology and Society
Instructor: Aanerud, Marian Elaine Melby
Description: Student may contact the instructor or department for information.

Phys 1301W Introductory Physics for Science and Engineering I
4 credit(s); Concurrent registration is required (or allowed) in Math 1271 or Concurrent registration is required (or allowed) in Math 1371 or Concurrent registration is required (or allowed) in Math 1571
Credit will not be granted if credit has been received for: PHYS 1201W
Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: This is the first of a three semester introductory course in physics for students in science 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 UHPCredit 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 1904 Freshman Seminar: Emerging Technologies in Israel
3 credit(s), max credits 6; Meets CLE req of Global Perspectives
Instructor: Marshak, Marvin L
Description: Student may contact the instructor or department for information.

Phys 1905 Freshman Seminar
1-3 credit(s), max credits 6;
Instructor: STAFF
Description:

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:

Phys 2201 Introductory Thermodynamics and Statistical Physics
3 credit(s);
Instructor: STAFF
Description: Introduction to thermodynamics, including its underlying statistical nature. Topics will include Kinetic Theory, Thermodynamics, Phase Transitions, and Boltzmann statistics. Applications explored will include the behavior of gases and the operation of heat engines.
Exam Format: Quantitative and qualitative problems

Phys 2251 Physics II
A-F only, 4 credit(s); Meets CLE req of Physical Sciences
Instructor: Aryal, Bijaya
Description: Student may contact the instructor or department for information.

Phys 2311 Modern Physics
4 credit(s);
Instructor: Cassola, Robert L
Description: This course is a printed distance learning section (known as a correspondence course) offered through Online and Distance Learning, College of Continuing Education. You work independently, not as part of a student group.
Visit "Class URL" for ODL policies, including fee and financial aid restrictions. The purpose of this course is to acquaint you with some of the principles by which the physical world operates, and to enable you to apply these principles to a number of different situations. It is hoped that, without a great deal of mathematical complexity, you will be able to see how these general principles extend to other fields. This course will stress being able to do things - simple problems, numerical estimates, and prediction of events. These skills only come with practice, so that, necessarily, this course is built around working problems.

**Style:** This is a printed correspondence section.

**Grading:** See attached syllabus

**Exam Format:** Supervised, in-person exams

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**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 2605 Quantum Physics Laboratory**

- **3 credit(s);**
- **Instructor:** STAFF
- **Description:** This laboratory is designed to accompany Physics 2601. The laboratory includes a series of experiments that are part of the foundation of quantum physics. It emphasizes important laboratory skills such as defining a problem and measurement procedure, debugging equipment, and the statistical analysis of data. Laboratory reports emphasize in depth technical communication of measurement and analysis techniques motivated by a solid description of the physical principles involved. This laboratory will give experiences that depend on and motivate the theories discussed in Physics 2601.

**Phys 3071W Laboratory-Based Physics for Teachers**

- **4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive**
- **Instructor:** STAFF
- **Description:** This course is intended to provide an experience based introduction to a selection of fundamental physics concepts especially chosen to be useful for potential elementary school teachers. These fundamental concepts include the interaction between objects and the description of that interaction by energy, forces, and fields. These ideas will be applied to electricity and magnetism as well as optics and heat. The course is activity-based and collaboration-oriented with four major goals: (1) to help you construct a set of physics ideas that you can apply to explain phenomena that are intrinsically interesting at a level appropriate to an elementary school science curriculum; (2) to help you understand the process of doing science; (3) to give you practice and confidence in doing science, and (4) to link the development of the course material to your own learning. The teaching and learning strategies used in this course will be valuable and appropriate for use in your teaching career. No specific background in science or mathematics is assumed in this course.

**Phys 3993 Directed Studies**

- **1-5 credit(s), max credits 10, 10 completions allowed;**
- **Instructor:** STAFF
- **Description:** Directed study in Physics in areas arranged by the student and a faculty member.
Phys 3994 Directed Research
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed research in physics in areas arranged by the student and a faculty member.

Phys 4001 Analytical Mechanics
4 credit(s);
Instructor: STAFF
Description: The course emphasizes a mathematically sophisticated reformulation of Newtonian mechanics. This course develops the skills of solving the difficult problems that arise in complex mechanical systems using advanced mathematical techniques. Applications include oscillators, orbital dynamics, and rigid body dynamics. This course serves as an introduction to the Lagrangian formulation of dynamics. Mathematics beyond the prerequisite mathematics courses are developed as required. The knowledge of physics learned in Physics 2303, 2403, or 2503 is assumed. A discussion section will give you the opportunity to discuss your conceptual understanding and practice your problem solving skills in collaboration with other students.

Phys 4041 Computational Methods in the Physical Sciences
4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phys 4051 Methods of Experimental Physics I
5 credit(s);
Instructor: STAFF
Description: This course is the first of a two semester sequence on the techniques used in a modern physics laboratory. Most of the work will be done in a laboratory. In this semester you will gain experience using analog and digital electronics by building various circuits that are in wide-spread use. You will also learn about acquiring signals and interfacing them to a computer. Basic familiarity with computers is assumed. Programming languages such as C++ will be used and skill in using them can be gained either through independent study during the course or from previous experience. Emphasis is also given to refining the techniques of writing scientific research reports suitable for publication. The course is designed for science and engineering students who have successfully completed Physics 2605 or the equivalent and assumes the knowledge and skills developed in that course. This course is an excellent introduction to modern laboratory techniques for upper division and graduate students in various scientific or technological fields. It is a required class for Physics and Astrophysics Majors.

Phys 4101 Quantum Mechanics
4 credit(s);
Instructor: STAFF
Description: This course in quantum mechanics will focus on using the Schrodinger Equation to predict the behavior of atomic and subatomic systems. The knowledge and skills learned in Physics 2601 are assumed. Mathematics beyond the prerequisite mathematics courses are developed as required. Topics addressed include the behavior of systems with a potential to predict the decay and scattering of particles, quantized angular momentum and its relationship to spin, the energy states of atoms, and the properties of materials. The course will introduce approximation methods such as Perturbation Theory and the Variational Technique. A discussion section will give you the opportunity to discuss your conceptual understanding and practice your problem solving skills in collaboration with other students.

Phys 4201 Statistical and Thermal Physics
3 credit(s);
Instructor: STAFF
Description: This course is an introduction to the statistical nature of the behavior of matter both from the classical and quantum point of view. The knowledge and skills learned in Physics 2303, 2403H, or 2503 as well as those from Physics 2601 are assumed. Mathematics beyond the prerequisite mathematics courses are developed as required. Topics addressed include: the enumeration of states both classically and quantum mechanically, entropy and free energy, partition functions, phase transitions, and the behavior of gasses and solids.

Phys 4303 Electrodynamics and Waves
3 credit(s);
Instructor: STAFF
Description: The third semester of the upper division 4001-4002 physics sequence covers electrodynamics and wave phenomena. The topics include electromagnetic waves in vacuum and in matter, radiating systems and diffraction, wave guides, interference phenomena, polarization and birefringence, optical properties of materials, non-linear optics, waves in
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 4621 Introduction to Plasma Physics
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Phys 4950H Senior Thesis
S-N only, 1-3 credit(s), max credits 6;
Instructor: STAFF
Description: Independent project with adviser.

Phys 4993 Directed Studies
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed study in Physics in areas arranged by the student and a faculty member.

Phys 4994 Directed Research
1-5 credit(s), max credits 10, 10 completions allowed;
Instructor: STAFF
Description: Directed research in physics in areas arranged by the student and a faculty member.

Phys 5001 Quantum Mechanics I
4 credit(s);
Instructor: STAFF
Description: Part I of a year-long course sequence in quantum mechanics for first-year graduate students in physics and other fields. Familiarity with quantum mechanics at the level of an upper division undergraduate physics course in the subject, such as Physics 4101, will be assumed. The course will include such topics as the 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 5022 Relativity, Cosmology, and the Universe
4 credit(s);2601 or instr consentCredit will not be granted if credit has been received for: AST 5022;
Instructor: STAFF
Description: In this course, we will explore the evolution of the Universe from the beginning to the present day, and will cover the standard theory and observations as well as the latest developments in cosmology. Specific topics include: the global geometry and dynamics, inflation, baryogenesis, big bang nucleosynthesis, cosmic microwave background radiation, gravitational instability and structure formation. The course is intended for graduates and upper-level astronomy and physics undergraduates.

Phys 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 5401 Physiological Physics**
4 credit(s);
Instructor: Broadhurst, John Henry
Description: This is a fourteen week course, during which we shall cover chapters one through seven of the text (Intermediate Physics for Medicine and Biology, Hobbie et al 4th Edition). This implies that we shall spend approximately two weeks on each chapter. It is however intended that the course will be taught in a flexible manner, with more time devoted to certain topics, and less to others, so as to maximize the usefulness of the available time. A web questionnaire will be available in the first week to collect information about your individual interests. This means that you will need to skim over the first seven chapters of the book in the first week, and before the first class, you should have read the first chapter carefully. All required work will be conducted by e-mail and web access. A short problem set will be e-mailed to you at the end of weeks two, four, six, eight, ten, and twelve.
Style: 70% Lecture. Collaborative problem sets
Grading: 60% final exam, 40% problem solving.
Exam Format: Web based descriptive and quantitative

**Phys 5621 Introduction to Plasma Physics**
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

**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 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;
**Physiology 6-125 Jackson Hall**

**Phsl 3051 Human Physiology**
- 4 credit(s); [BIOL 1009 or 1 yr college biol], 1 yr college chem
- Credit 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](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](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: Lectures for this course are offered on-line in the form of detailed lecture notes, reading assignments, problem sets, quizzes and screen-capture videos with one class meeting/week to address questions and to discuss the
material. Topics covered in the course focus on understanding control mechanisms involved in maintaining homeostasis with respect to critical cell functions including regulation of intracellular pH, cell volume, intracellular electrolyte composition, membrane potential and transport processes, molecular motors and intracellular calcium regulation. Grading is based on two in class examinations, problem sets, weekly quizzes and a final exam.

**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 5700 Cell Physiology**
A-F only, 4 credit(s);
Instructor: Palmer PhD,Melissa L
Description: Lectures for this course are offered on-line in the form of detailed lecture notes, reading assignments, problem sets, quizzes and screen-capture videos with one class meeting/week to address questions and to discuss the material. In addition, a discussion section meets once a week where students present and discuss a paper and review article from the literature related to the lectures. Topics covered in the course focus on understanding control mechanisms involved in maintaining homeostasis with respect to critical cell functions including regulation of intracellular pH, cell volume, intracellular electrolyte composition, membrane potential and transport processes, molecular motors and intracellular calcium regulation. Grading is based on two in class examinations, problem sets, weekly quizzes, two paper presentations and a final exam.
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: Kistler, H Corby  
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 8901 Preparation of Research Proposals  
S-N only, 1 credit(s);  
Instructor: Lefebvre, Paul A  
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 people have interacted with plants throughout history. We will discuss the many ways plants have shaped our world by fundamentally altering the planet’s atmosphere and climate and have satisfied our desires for nourishment, clothing, shelter, energy, beauty, health and altered mental states. Topics that will be covered include the domestication of crops that led to the modern civilization (and the famine-causing diseases that have followed); how modern crop varieties are developed; how some crops interact with soil microbes reducing the need for fertilizers; the use of plants to make chemicals that can be medicinal, recreational or poisonous; plants that provide visual and culinary delights; the ethics of first world countries exploiting third world knowledge; and how modern biotechnology is being used to create designer plants, the potential of these plants, and who benefits from this technology. Also included in the course are greenhouse experiments in which students examine the worth of some commonly held thoughts about how to grow garden plants.  
Style: 35% Lecture, 10% Film/Video, 20% Discussion, 10% Laboratory, 10% Small Group Activities, 15% Student Presentation. Laboratory time is spent in the greenhouse  
Grading: 12% final exam, 35% reports/papers, 5% quizzes, 13% written homework, 15% in-class presentation, 15% class
PBio 4321 Minnesota Flora
3 credit(s);
Instructor: Weiblen, George D
Description: This course teaches practical skills for identifying plant species and surveying Minnesota vegetation to students of biology, environmental sciences, resource management, horticulture, and beyond. The course integrates botany, ecology, evolution, earth history, climate, and global change in the context of local plant communities. Labs and Saturday field trips explore Minnesota plants and plant communities through a combination of web-enhanced digital technology and classical botany. Exercises cover how to (1) identify plant species and describe communities, (2) conduct vegetation surveys, (3) collect botanical data and preserve specimens, and (4) develop digital resources for Minnesota flora. Concepts and exercises are illustrated with particular examples of Minnesota native and naturalized plants.
Style: 10% Lecture, 5% Discussion, 20% Laboratory, 20% Small Group Activities, 5% Student Presentation, 10% Demonstration, 20% Field Trips, 10% Web Based. Students are also expected to attend either two Saturday field trips, a weekend overnight field trip, or a special arrangement with the instructor in the event that other weekend commitments conflict with scheduled field trips.
Grading: 15% mid exam, 20% final exam, 20% special projects, 5% class participation, 20% laboratory evaluation, 20% other evaluation. Other Evaluation - 20% final lab exam
Exam Format: short answer, lab practical

PBio 4794W Directed Research: Writing Intensive
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: The Writing-Intensive CBS Directed Studies course designator is used to allow students to receive credit for an independent writing-intensive non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of their directed studies project. Thesis writers who have finished collecting the data for their thesis can register for 4793W in the final semester. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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: The CBS 4794W Writing Intensive Directed Research courses enable students to receive credit towards the University of Minnesota writing-intensive requirement for an independent 4000-level writing project related to research conducted with a University of Minnesota faculty member. WI directed research may be taken after one or more semesters of 4994 directed research or an equivalent experience. Students who pursue 4794W directed research must work with their faculty mentor to develop a mutually agreeable writing plan. The faculty mentor must agree to deliver discipline-specific writing instruction over the course of the semester. To meet the University requirement, this instruction should not be limited to providing summative feedback on a single piece of capstone level work towards the end of the semester. Writing intensive courses require 10-15 pages of formal writing apart from any informal writing. At least one formal writing assignment needs to undergo a substantive revision after receiving and discussing feedback. Typically, a final paper will cover the background and significance of the student project, results, materials and methods and a discussion section (all loosely modeled after a peer reviewed journal article). Other formal scientific writing genres can also be a part of the specified work. Once students register for a CBS 4794W course, they will have access to a Moodle site that has information about the structure of the final product and writing guides. Additional information about using these courses to fulfill the WI requirement may be obtained from the CBS Writing Enriched Curriculum liaison, Dr. Leslie Schiff. She may be contacted by email at schif002@umn.edu. Students who enroll in Writing-Intensive Directed Research for 3 credits are expected to devote 135 hours or more to lab work and scientific writing/writing instruction over the course of the semester. Three credits typically involves 8-10 hours per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research. The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

PBio 4993 Directed Studies
S-N only, 1-7 credit(s), max credits 7, 7 completions allowed;
Instructor: STAFF
Description: The CBS Directed Studies course designator is used to allow students to receive credit for an independent non-bench research project with a University of Minnesota faculty member. Each credit hour of directed studies requires at least 45 hours of mentored work over the course of the semester. Often students complete a literature review as part of a directed studies project. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Springer,Nathan Michael
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

PBio 4994 Directed Research
S-N only, 1-6 credit(s), max credits 42, 7 completions allowed;
Instructor: Katagiri,Fumiaki
Description: The CBS 4994 Directed Research courses enable students to receive credit for an independent 4000-level research project mentored by a University of Minnesota faculty member. Each credit hour of directed research requires 45 hours in the lab over the course of the semester. Students who enroll in Directed Research for 3 credits are expected to devote 135 hours or more to lab work over the course of the semester. Three credits typically involves 8-10 hours of lab work per week. Please initiate the registration process by completing the student portion of the digital contract found here: http://www.cbs.umn.edu/learn/undergraduates/undergraduate-research/directed-research? The contract will need to be approved by the faculty mentor as well as the Director of Undergraduate Studies for the course designator. Students will be issued a permission number to register once the contract is fully approved. Please contact Dr. Kelaine Haas (khaas@umn.edu), the Undergraduate Research Coordinator in CBS for any additional questions about this course.

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 restructing. 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 5960 Special Topics: PBS Itasca Orientation
1-3 credit(s), max credits 18, 6 completions allowed;
Instructor: Gibson,Sue
Description: Student may contact the instructor or department for information.

Plant Pathology 495 Borlaug Hall

PIPa 1005 Plants Get Sick Too
4 credit(s);Meets CLE req of Biological Sciences
Instructor: Kurle PhD,James E.
Description: This course is an introductory survey of plant pathology presented in lectures, on the web, and in the
laboratory. It meets the criteria for a Biological Sciences Core presented by the Council of Liberal Education through both lecture and laboratory exercises. The course uses examples drawn from plant pathology to develop an understanding of general biological concepts, such as biological nomenclature, taxonomic rank and organization, ecological roles, natural selection and evolution, diversity, and physiology and primary metabolism. The student will develop a general understanding of: 1) the concepts and terminology used to describe and understand plant disease, 2) the major groups of plant pathogens, 3) the interaction of host and pathogen biology, crop ecology, and control measures with plant disease development, and 4) the role of plant disease in human affairs. Selected viruses, bacteria, fungi, nematodes that are pathogens of plants grown in Minnesota will be used to illustrate concepts presented in lectures. This material is integrated with materials and exercises presented in the laboratory. Supplementary readings will be available on library reserve. Particular emphasis is placed on the importance of plant diseases to human welfare and in human history.

Course Objectives: Students will: 1) Become familiar with the agents that cause plant disease. 2) Understand the relationships of hosts, pathogens, and environment that determine the occurrence and severity of plant diseases. 3) Learn how plant diseases are managed or controlled. 4) Learn how plant diseases have affected humans both historically and in modern times. 5) Learn to identify a selection of plant diseases that occur commonly in Minnesota. 6) Learn basic laboratory techniques used to detect, identify and manipulate plant pathogens.

PIPa 2003 Plague, Famine, and Beer: The Impact of Microscopic Organisms on Human Civilization
3 credit(s); Meets CLE req of Historical Perspectives
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.
Grading: 100% special projects. depends on topic and instructor

PIPa 5203 Introduction to Fungal Biology
3 credit(s);
Instructor: Bates, Scott Thomas
Description: Fungi are a critical component for maintaining diversity and function in terrestrial ecosystems across the globe. They regulate decomposition rates, facilitate plant nutrient uptake, and have profound impacts on agriculture, economics, as well as human affairs. The goal of this course is to provide an introduction to the key components of fungal biology; including ecology, physiology, genetics, and diversity. The course will cover major groups of fungi, highlighting their life cycles and key morphological features. Laboratories are intended to give hands-on experience with a diverse range of fungal organisms mentioned in lectures as well as basic molecular techniques used in the field of mycology. Field trips and guest lectures will introduce you to fungal research on UMN campus and allow you to observe fungi in their natural environments.
Grading: 30% mid exam, 25% final exam, 10% special projects, 25% laboratory evaluation, 10% other evaluation.
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 understanding about the fundamentals of sequence analysis, database searching and data-mining through computer labs and independent projects. Most class sessions consist of lectures, discussions, and small group activities. Prerequisites are an introductory course in genetics and either cell biology or biochemistry -- or -- consent of instructor.
Style: 60% Lecture, 20% Discussion, 20% Laboratory. Frequent small group activities and computer labs
Grading: 30% mid exam, 30% final exam, 15% special projects, 15% written homework, 10% class participation.
Exam Format: Approximately 10 short answer question plus one or two longer essay-type questions.

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
1-8 credit(s), max credits 8, 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
1-8 credit(s), max credits 8, 1 completion allowed;
Instructor: Kurle PhD, James E.
Description: Student may contact the instructor or department for information.

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 1101 Beginning Polish
5 credit(s); Credit will not be granted if credit has been received for: PLSH 4101;
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 1001 American Democracy in a Changing World
4 credit(s); Meets CLE req of Social Sciences
Instructor: Karch, Andrew Jonathan
Description: Frequent elections have long been a part of the American political landscape, and over time American politics has evolved in the direction of greater potential for popular participation. More people have gained the full rights of citizenship, the connection between representatives and the public has become increasingly direct, and the number and frequency of elections have increased. These trends have resulted in what some observers call the "permanent campaign." This course introduces students to the institutions and processes of American government, concluding with a wide-ranging discussion of recent issues in American public policy. In doing so, it examines the main elements of the permanent campaign, the factors that contributed to its emergence, its impact on political institutions and the policymaking process, and its normative implications.
Style: 90% Lecture, 10% Discussion.

Pol 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: Americans hardly need to be told that international politics matters. US forces are still deployed around the globe, and economic uncertainty has barely abated. Knowing that international politics matters is one thing, making sense of it is another. This course will give students the tools they need to begin to understand patterns and trends in global politics. Students will be introduced to international relations' theoretical traditions, but the course will focus primarily on explaining and understanding historical and especially current problems in world politics. It will explore, among other issues, the causes of war and peace, the limited use of force, humanitarian intervention, nuclear proliferation, nationalist conflict, international ethics, the politics of international trade and finance, foreign aid, globalization, the prospects for environmental cooperation and human rights norms, migration, terrorism, and the future of world politics. By the end of the course, students should be familiar with all these issues and others, should have developed their own views on these much-debated questions, and should be able to apply basic analytical frameworks to answer them.
Style: 90% Lecture, 10% Discussion.
Pol 1054 Puzzles in World Politics
4 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Samuels, David Julian
Description: This course provides an introduction to the study of comparative politics, which is the study of politics within different countries around the world. Comparative politics aims to understand how different peoples around the world seek to establish a durable and legitimate political system, how they seek to contest the legitimacy of and attempt to transform that system, and how they seek to benefit from that system. Specifically, the course explores the following questions: 1) What is the "nation-state" and where does it come from? 2) What distinguishes democracy from dictatorship? 3) What factors cause democracy to emerge? 4) Why do democracies sometimes collapse into dictatorship? 5) How does ethnicity impact politics? 6) What is nationalism and how does it impact politics? 7) How does religion drive conflict in the contemporary world? 8) What is the impact of women's more prominent political role around the world? 9) What causes social movement mobilization around the world? 10) What causes civil war to erupt sometimes? 11) Why are some countries rich and some countries poor? 12) Why do some countries tax and spend quite a lot, while others have lower tax rates and lower levels of redistribution?
Style: 60% Lecture, 25% Discussion, 15% Small Group Activities.
Grading: 30% mid exam, 30% final exam, 25% reports/papers, 15% written homework. There is one five-page paper, and ten short assignments
Exam Format: Blue Book: short and long answers

Pol 1201 Political Ideas and Ideologies
4 credit(s); Meets CLE req of Civic Life and Ethics; meets CLE req of Historical Perspectives
Instructor: Dahl, Adam J
Description: Here are the questions we will attempt in this course to answer through intensive reading and writing: What is the purpose of politics? What is the meaning of freedom? Of justice? How can I make sense of my political views? What are the limits of my political views? What is political theory and why should I try to approach political ideas theoretically? This semester this course will focus especially on the question of democracy. Is democracy the best form for organizing political life? What are its strengths? What are its weaknesses? How might we improve contemporary democratic life? Students will read, speak, and write a great deal over the course of the semester. We will work, as a class and with TAs and the instructor, on the processes of reading and writing about these difficult texts and subjects. Here are the five books ordered for the course through the bookstore; they are listed in the order that we will read them. The Republic Plato, tr Grube (Hackett) On Liberty and Other Essays John Stuart Mill, ed. J. Gray (Oxford University Press) Later Political Writings Marx, ed. T. Carvell (Cambridge University Press) The Wretched of the Earth Fanon (Grove. 2004 ed) Selected Political Writings Gandhi (Hackett)
Style: 70% Lecture, 30% Discussion. ALL STUDENTS SHOULD PURCHASE THE BOOKS!
Grading: I prefer not to use formal percentages to calculate grades. Three papers plus a take-home final. Paper rewrites possible. Students may receive a better grade if their work improves over the course of the semester
Exam Format: Final exam will be summative

Pol 1905 Freshman Seminar: Pol. of Disruption: Violence and Its Alternatives
3 credit(s);
Instructor: Sarbah, Anoop K
Description: Student may contact the instructor or department for information.

Pol 1905 Freshman Seminar: Constitutional Meanings
3 credit(s);
Instructor: Beaumont, Elizabeth
Description: Student may contact the instructor or department for information.

Pol 1905 Freshman Seminar: Wars, Memory, Political Identity: Israel & MidEast
3 credit(s);
Instructor: Zelkovitz, Ido
Description: Student may contact the instructor or department for information.

Pol 3070 Faculty-Supervised Individual Field Work
Pol 3235W Democracy and Citizenship

Instructor: Dahl, Adam J
Description: In this course we will examine classic texts in the history of American political thought in order to understand how Americans have theorized about and argued over their political system, and to consider how we can draw upon these texts to address contemporary American political problems. Some of the questions we will address: What political and moral obligations do citizens have to the state, and to each other? What is the basis of legitimate state authority? What is the social contract, and how have Americans used social contract theory to legitimate their governments? What is the right of resistance, and when is it acceptable for individuals or a people to resist or rebel against their government? Does the Declaration of Independence merely list the reasons for separating from Great Britain, or is it also a founding document establishing American principles of liberty and equality? How does the Constitution limit (or fail to limit) the power of the state, and protect (or fail to protect) individual and corporate rights? Is class conflict over the distribution of wealth in society a recent development or a long-standing feature of American political discourse? How have religious texts and ideas been used as a basis for political argument? How relevant to our century and our political problems are the ideas of 50k, 100, 150, 200, or more years ago? What, if anything, can we still learn and use from these past ideas and theories? How might they help us, or lead us astray, in addressing our own problems today? Prominent theorists covered include Winthrop, Franklin, Paine, Jefferson, Adams, Madison, Hamilton, the Anti-Federalist "Brutus," Thoreau, Calhoun, Douglass, Lincoln, Sumner.

Style: 25% Lecture, 75% Discussion.
Grading: 90% reports/papers, 10% other evaluation. Grade based 90% on coursework, 10% on internship supervisor's evaluation.
This course explores the meanings of democracy and citizenship from historical and contemporary perspectives. Democracy is almost universally championed in contemporary politics. But what does democracy mean, what does it require of us, and why should we value it? Who is included in the concept of "we the people" and who gets to decide? How should democracies deal with differences and conflicts? What are the rights and responsibilities of the citizens of a democratic community? Why is there on-going fear that democracies devolve into tyranny? How have understandings of democracy and citizenship evolved over time? What kinds of practical mechanisms and processes should be used to institutionalize democracy? We will explore these questions from historical perspectives and in relation to current political events and challenges. You should emerge from this course not only with a deepened understanding of the historical and intellectual tradition of democratic theory, but also with the ability to articulate your own democratic ideals, your understanding of democratic citizenship, and how you conceive of your relationship to these ideals.

Pol 3252W 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 3309 Justice in America
3 credit(s);
Instructor: Johnson, Timothy Russell
Description: The principal purpose of this course is to introduce you to the scientific study of judicial politics. Specifically, we will examine theoretical issues regarding judicial process and politics. This course, unlike constitutional law and civil liberties classes, does not study legal doctrine; rather, it examines political aspects of the legal system, with an emphasis on the social scientific literature on law and legal process.
Style: 80% Lecture, 20% Discussion.
Grading: 70% mid exam, 30% final exam.
Exam Format: Essay

Pol 3310 Topics in American Politics: Personality and Politics
3 credit(s), max credits 6;
Instructor: Lavine, Howard G
Description: For more than half a century, psychologists and political scientists have sought to understand why some people gravitate toward political conservatism and others toward moderate or liberal ideologies. This course will examine classic and contemporary literature on the relationship between psychological dispositions (including traits, needs, physiological processes, and genes) and political preference and orientation. We will begin the course by examining the nature and influence of authoritarianism, a psychological disposition that launched the study of personality and politics in the 1950s and that continues to fuel debate about the underpinnings of political orientation. We will then examine how a wide variety of individual differences in personality, genes, and physiological functioning are responsible for producing differences in political ideology. The course will rely on both books and articles, and will require a 7-page term paper.

Pol 3317 Food Politics: Actors, Arenas, and Agendas
A-F only, 3 credit(s); Meets CLE req of Social Sciences
Instructor: Rahn, Wendy Marie
Description: Food Fights! Neighbors battle over backyard chicken ordinances, Members of Congress disagree about how to safeguard the food supply, and high school students protest new standards in the Federal School Lunch Program. From New York to California and places in between, food—how it's grown, transported, processed, and consumed—has become a political battleground. Take this course if you want to learn more about the various resources, arguments, evidence, and rules of engagement that structure contemporary food politics. This course is eligible for the public health minor and for the BSE major.

Pol 3319 Education and the American Dream
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Abernathy, Scott F
Description: This course is intended as introduction to education politics and policy in the United States. It is designed for
any student who might have an interest in exploring education, public policy, or American government. Topics will include equality of educational opportunity, educating democratic citizens, school finance, the role of political institutions in making educational policy, and efforts to reform and remake American education, including charter schools and private school vouchers. By the end of the course, students should have a basic understanding of the provision of education in the United States, including the ways in which education is governed and the institutions involved in that governance. Students should be able to critically reflect on the degree to which American education fulfills the sometimes-competing goals Americans have for our schools.

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

**Exam Format:** essay, short essay

**Pol 3325 U.S. Campaigns and Elections**

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

**Instructor:** STAFF

**Description:** Free and fair elections are the cornerstone of American democracy. Yet, these days elections seem to polarize rather than unite people, pitting Democrats against Republicans, liberals against conservatives. Important campaign issues such as health care, jobs, and the role of government but also moral issues such as gay marriage and abortion divide candidates and the public. In addition, campaign rhetoric has become increasingly negative and every day we read about candidates attacking each other. Given all this, are elections good for democracy? Who dares to run for office in this political climate? How do candidates try to convince people to vote for them? And do citizens still participate in elections or are they turned away by the negativity and divisiveness? We will discuss these and many more questions during the semester. Since we will be in the midst of a congressional election season, we will have plenty of real-life examples that we can use to confirm or challenge theories developed by political scientists. Moreover, you will become an election expert yourself by closely following a congressional election of your choice.

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

**Exam Format:** essay, short essay

**Pol 3410 Topics in Comparative Politics: Politics of India**

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

**Instructor:** Sarbahi, Anoop K

**Description:** This course will introduce you to the politics of India, the world's largest democracy with over 800 million eligible voters?2.5 times the US population. Home to around a fifth of the world's population, India is one of the most ethnically-diverse nations with over 4,500 distinct ethno-cultural groups belonging to all major world religions and speaking over 750 languages. We will begin with a study of the pre-colonial and colonial roots of Indian democracy and proceed to explain the survival of democracy in India, a unique and intriguing achievement in the developing world. The remainder of the course will cover key topical issues related to contemporary Indian politics and is broadly organized around the following themes: (1) State Institutions, Processes, and Civil Society; (2) Politics of Identity; and, (3) Political Economy of Governance and Development. We will learn about India's political institutions as well as challenges confronting these institutions such as widespread socio-economic inequalities, social exclusion and deprivation, deep-seated societal divisions, ethnically-religious and ideological insurgencies, continued criminalization of politics and rampant corruption.

**Style:** 55% Lecture, 25% Discussion, 20% Small Group Activities.

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

**Exam Format:** essay, short essay

**Pol 3411W 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:** This course examines the establishment, institutions and functions of the European Union, with an overview of the political processes in European countries and the European Union. Students will examine the history behind the EU's construction, theories of European integration, the EU's institutions and policy competencies, reoccurring problems with democratic representation in the EU, and the EU's political and economic influence over candidate countries via requirements for entry. The class will also discuss the creation of the European Monetary Union and the Euro currency, and challenges it faced during the sovereign debt crisis. Finally, we will address challenges of expansion and foreign policy coordination in Ukraine.

**Grading:** 20% mid exam, 20% final exam, 20% reports/papers, 20% attendance, 20% reflection paper.

**Pol 3477 Political Economy of 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
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—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 corporate social responsibility/sweatshops, the industrial food system in the US, and the privatization of life (e.g. genes), water, and war.

style: 40% Lecture, 15% Film/Video, 30% Discussion, 15% Small Group Activities.

grading: 25% final exam, 50% reports/papers, 25% class participation. The writing assignments comprise 75% of the final grade, and participation/online quizzes (completed before class) are 25% of the final grade.

exam format: The final exam will be an essay exam.

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, genetics, evolution), 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 authority, which examines the power of social context and perceptions of legitimate authority in altering social and political behavior. To what extent do political preferences spring from
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 3785 Persuasion and Political Propaganda**

**Description:** This course will provide an introduction to persuasion and political propaganda. We will first define propaganda and discuss the primary theories in persuasion and propaganda that could be applied to designing and analyzing propaganda campaigns. We will then apply these theories to analyze WWI and WWII propaganda posters, propaganda films, and political campaign commercials. This course is intended to be 1/3 or less lecture and 2/3 or more discussion. I intentionally limited the number of students in this class to facilitate class discussion and group exercises.

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

**Grading:** 20% mid exam, 20% final exam, 20% reports/papers, 20% special projects, 20% class participation.

**Exam Format:** short answer/essay

**Pol 3833 The United States and the Global Economy**

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

**Pol 3835 International Relations**

**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 4315W State Governments: Laboratories of Democracy**

**Description:** Student may contact the instructor or department for information.
Description: This course examines the recent revitalization of political institutions in the American states and the implications of this resurgence for the making of public policy. State governments regulate and tax a wide range of business activities and perform a host of vital services. Even though state governments affect our lives every day, however, they are rarely at the forefront of the minds of the American public. The goals of this course are to introduce you to these important arenas of government and to examine the Minnesota political system in a comparative perspective.

Grading: First midterm (30%) Second midterm (30%) Final exam (40%)

Pol 4473W Chinese Politics
3 credit(s); Credit will not be granted if credit has been received for: AMIN 4525W; 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 4478W Contemporary Politics in Africa and the Colonial Legacy
4 credit(s); 1054 or 3051 or non-pol sci grad or instr consent Credit will not be granted if credit has been received for: POL 5478; Meets CLE req of Global Perspectives; meets CLE req of Writing Intensive
Instructor: Nimtz Jr, August H
Description: What explains the crisis that Africa finds itself in today? What explains "ethnic" tragedies such as Darfur, Somalia or Rwanda? Why has Africa had such difficulty in feeding itself? Why has there been a decline in economic development for the last decade or so? If the "socialist" path to development has proven to be bankrupt then why has the capitalist course also been difficult to realize? Has a genuine revolution unfolded in South Africa and if so what kind? At the end of this course you should be in a position to give informed answers to these and other such questions. This course intends to introduce you to the political systems of sub-Saharan Africa with some attention to North Africa. Among the topics that you will examine are traditional or pre-colonial political systems, the impact of colonial rule, the reaction to colonialism and the rise of nationalism, the politics of economic development in independent Africa, and the liberation of southern Africa. An underlying assumption of the course is that the current crisis in Africa cannot be explained without an understanding of Africa's history--before independence in the 1960s and before colonial rule at the end of the 19th century. Therefore, about half of the course will focus on events leading up to independence. Another basic assumption is that Africa's reality can only be understood within global perspective. How that came to be will also be a focus of the course. Finally, as there are some 50 different countries on the African continent, it would be unrealistic to expect a fourteen-week course to adequately address each political system. Thus, the emphasis will be on themes and issues that affect the majority of countries. There will of course be exceptions to this, particularly in the case of South Africa which will occupy a significant portion of the course.

Pol 4495 Politics of Family, Sex, and Children
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Kelliher, Daniel R
Description: If you take this course you will confront contemporary fights over family, sex, and children. Here are the big questions: (1) Who controls sex? We will look at power in sexual relationships, sexual freedom & the state, and sexual elements in political ideologies. (2) Who should be allowed to make a family? We will do same-sex marriage, polygamy, and teenage childbearing. (3) What happens to children? We will look at countries with strong pro-child policies, but also at the dark side: child soldiers, child prostitutes, and sexual abuse of children by clergy. (4) What are the odds that your family will survive? Time to face up to financial crisis, bankruptcy, and divorce, and see the effects of taxation, social support for families, childcare, and family medical leave. (5) Do politicians care? We will see what policies actually help families, plus how political campaigns manipulate images of the family for their own ends. Got more questions about the class? Just ask me: kelliher@umn.edu

Style: 50% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities.
Grading: 10% mid exam, 10% final exam, 50% reports/papers, 10% quizzes, 20% class participation.

Pol 4495 Politics of Family, Sex, and Children
A-F only, 3 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: Marchetti, Kathleen Maeve
Description: If you take this course you will confront contemporary fights over family, sex, and children. Here are the big...
questions: (1) Who controls sex? We will look at power in sexual relationships, sexual freedom & the state, and sexual elements in political ideologies. (2) Who should be allowed to make a family? We will do same-sex marriage, polygamy, and teenage childbearing. (3) What happens to children? We will look at countries with strong pro-child policies, but also at the dark side: child soldiers, child prostitutes, and sexual abuse of children by clergy. (4) What are the odds that your family will survive? Time to face up to financial crisis, bankruptcy, and divorce, and see the effects of taxation, social support for families, childcare, and family medical leave. (5) Do politicians care? We will see what policies actually help families, plus how political campaigns manipulate images of the family for their own ends. Got more questions about the class? Just ask me: kelliher@umn.edu

**Style:** 50% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities.

**Grading:** 10% mid exam, 10% final exam, 50% reports/papers, 10% quizzes, 20% class participation.

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**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.

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**Pol 4773W Interest Groups, Social Movements and Politics of Race, Class, and Gender**

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

**Instructor:** Marchetti, Kathleen Maeve

**Description:** 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 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 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:** This course surveys current theories of international relations, and introduces students to elementary game theory. Major topics include the causes of war, the conditions for international cooperation, and the role of international institutions. By the end of the semester, students will be expected to: 1. Understand the relevant international relations literature; 2. Understand simple game-theoretic techniques; 3. Critically analyze theories of international politics; and 4. Understand the general scientific method of theory building and empirical testing. Possible textbooks: Kenneth N. Waltz. 1954. Man, the State, and War; Waltz, Kenneth N. Theory of International Politics; Bruce Bueno de Mesquita, 2000. Principles of International Politics.

**Style:** Lectures and discussions after each homework is graded.
**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

**Pol 5810 Topics in International Politics and Foreign Policy: Managing Global Crises**  
*3 credit(s), max credits 6;*  
**Instructor:** Schwartz, Eric Paul  
**Description:** Managing Global Crises: Human Rights and Humanitarian Challenges for Policy Makers and Practitioners  
Mondays, 6 pm to 8:45 pm, Blegen 215 (Offered as PA 4890/GLOS 5900/POL 5810/PA 8890)  
Humphrey School Dean Eric Schwartz will be teaching this course. Dean Schwartz served in the White House and the State Department in the Clinton and Obama Administrations, as well as the United Nations and with Human Rights Watch. From Syria and Iraq to Somalia and Sudan, man-made disasters, which principally impact populations in the developing world, pose compelling challenges to the capacities of governments and international organizations to prevent and alleviate suffering and promote recovery. Moreover, especially after 9/11, the complex crises that result in humanitarian suffering became the focus of serious concern among policy-makers and practitioners in the United States, who began to view effective responses as important in avoiding political instability and state failure. This course, which will involve lecture and class discussion, will examine the efforts of the international community?governments, international organizations, non-governmental organizations (NGOs) and others?to respond to humanitarian, recovery and reconstruction challenges posed by man-made disasters that impact civilians. (We will also consider disasters related to natural hazards, like storm surges and hurricanes, though those will not be a major focus of the course.) The issues and institutions that relate to humanitarian challenges and humanitarian suffering around the world are often studied separately. However, this course will take a broad and integrated approach, designed to give students a wide understanding of the lay of the humanitarian land and the questions with which policy makers and policy practitioners grapple?including those relating to security, disaster response and human rights, and the roles of international and non-governmental humanitarian organizations. In addition to focusing on the efforts of the international community, the course will examine the role and institutions of the United States government, the largest provider of international humanitarian aid. Learning objectives: Students who successfully complete the course will gain a broad understanding of the policy issues that are involved in international humanitarian response?an understanding that will integrate concepts from a range of fields?as well as knowledge of the key institutions that define and impact policy and practice in this area. Students will also develop an appreciation of the key dilemmas faced by policy-makers and practitioners involved in response to complex crises, the challenges to achieving policy and operational objectives, and the strategies for success.  
**Style:** 25% Lecture, 70% Discussion, 5% Guest Speakers. See syllabus for description of class discussion.  
**Grading:** 40% final exam, 25% reports/papers, 35% class participation. Report is 3-4 page policy brief based exclusively on material provided in syllabus and in class. See syllabus for specifics on class participation and other grading.  
**Exam Format:** Essay

**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 8060 Research Proseminar in Political Science**  
*S-N only, 2 credit(s), max credits 8, 4 completions allowed;*  
**Instructor:** Samuels, David Julian
Description: Students will meet to discuss and evaluate submissions to Comparative Political Studies. Students will learn best practices for doing peer-reviews of journal submissions, and will learn presentation skills.

Pol 8106 Quantitative Political Science I
3 credit(s);
Instructor: Goren, Paul Nurullah
Description: Student may contact the instructor or department for information.

Pol 8120 Core Course in Political Methodology: Modeling Political Processes
3 credit(s);
Instructor: Freeman, John Roy
Description: Student may contact the instructor or department for information.

Pol 8126 Qualitative Methods
3 credit(s);
Instructor: Kelliher, Daniel R
Description: This course is 100% practical, hands-on training in fieldwork: -- Interviewing -- Participant-observation -- Handling visual evidence -- Analysis of physical & spatial data -- Problems of interpretation & inference -- Practical management of field research The only way to learn this stuff is by doing it. So this class shoves you out the door and onto the street. Students in this course have carried out research in dozens of different fieldwork settings across all of the diverse communities, organizations, businesses, and physical sites available in the Twin Cities area. You'll also get training in the ethics of fieldwork and the crucial task of getting dissertation and professional research approved by the Human Subjects Committee and the Institutional Review Board (IRB). Students from all departments are welcome. Questions? Call me: Daniel Kelliher, 612-624-1671, or email: kelliher@umn.edu

Pol 8160 Topics in Models and Methods: Multilevel Modeling
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Freeman, John Roy
Description: Student may contact the instructor or department for information.

Pol 8160 Topics in Models and Methods: 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 8201 Understanding Political Theory
1.5 credit(s), max credits 3;
Instructor: Luxon, Nancy
Description: Student may contact the instructor or department for information.

Pol 8260 Topics in Political Theory: Constitutional Theory: Law, Power, and Right
3 credit(s), max credits 6;
Instructor: Beaumont, Elizabeth
Description: Student may contact the instructor or department for information.

Pol 8302 Public Opinion and Political Behavior
3 credit(s);
Instructor: Goren, Paul Nurullah
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: Federico, Christopher Michael
Description: Student may contact the instructor or department for information.

Pol 8360 Topics in American Politics: Democratic Deliberation and Processes
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Myers, C. Daniel
Description: POL 8360: Small Group Processes and Democratic Deliberation The ?deliberative turn? in democratic theory
has inspired a range of new empirical research. This work asks how deliberative existing democratic systems are and what can be done to make them more so. Drawing on work in political science, communications, psychology, and sociology, we will examine this new literature, exploring such questions as: How can we measure the quality of deliberation? Can conversation about politics, whether in small groups, in the media, or in everyday conversation, meet the standards of deliberative theory? What can empirical research tell us about how to improve the quality of deliberation? We will start by briefly reviewing the normative literature spawned by the ?deliberative turn.? The bulk of the course will explore literatures on small group processes, and what lessons this research can teach us about the feasibility of creating deliberation in institutions like deliberative polls, citizen juries, and other ?mini-publics.? Finally, we will examine research on everyday political conversation among citizens, asking what such conversation looks like and whether it can play a role in a deliberative political system. This course meets the requirements of an elective class for the Ph.D. minor in Political Psychology.

**Pol 8460 Topics in International Relations: Global Civil Society**
- 3 credit(s), max credits 6;
- **Instructor:** Ron, James
- **Description:** Student may contact the instructor or department for information.

**Pol 8460 Topics in International Relations: Political Violence**
- 3 credit(s), max credits 6;
- **Instructor:** Parkinson, Sarah Elizabeth
- **Description:** Student may contact the instructor or department for information.

**Pol 8660 Topics in Comparative Politics: Democratization**
- 3 credit(s), max credits 9, 3 completions allowed;
- **Instructor:** Samuels, David Julian
- **Description:** Student may contact the instructor or department for information.

**Pol 8660 Topics in Comparative Politics: Political Violence**
- 3 credit(s), max credits 9, 3 completions allowed;
- **Instructor:** Parkinson, Sarah Elizabeth
- **Description:** Student may contact the instructor or department for information.

**Portuguese 214 Folwell Hall**

**Port 1101 Beginning Portuguese**
- 5 credit(s);
- **Instructor:** STAFF
- **Description:** Introduction to Portuguese: speaking and understanding, pronunciation, reading and writing, basic grammar, cultural aspects of the language and Portuguese-speaking countries (Portugal, Brazil, Mozambique, Angola, Cape Verde, Guinea Bissau, and Sao Tome and Principe).

**Port 1103 Intermediate Portuguese**
- 5 credit(s);
- **Instructor:** STAFF
- **Description:** Intermediate Portuguese: Speaking and comprehension, development of reading and writing skills based on Portuguese-language materials, cultural and linguistic aspects of Portuguese-speaking countries (Portugal, Brazil, Mozambique, Angola, Cape Verde, Guinea Bissau, and Sao Tome and Principe).

**Port 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 4101 Beginning Portuguese
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Port 4103 Intermediate Portuguese
2 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

Port 5520 Portuguese Literary and Cultural Studies
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Beal, Sophia Funkhouser
Description: Student may contact the instructor or department for information.

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.

PsTL 722 Introductory Algebra (Computer)
0 credit(s);
Instructor: Robertson, Douglas Frederick
Description: A first course in algebra taught using computer-mediated instruction. You will learn new material using interactive multimedia computer software. There are no lectures. You will be on the computer 70% of each class period. The rest of the time you will be working on algebra problems, taking exams, and working individually with the instructor. This course is not self-paced; you must follow a set schedule for checkpoints, homework, and exams. Course covers concepts and procedures of elementary algebra at a level of difficulty and abstraction geared for students enrolled at a research university. To be successful you must enter the course being able to work with whole numbers, fractions, decimals, and percents. Course content includes real number (signed number) operations, equations, inequalities, absolute value, rectangular (x-y) graphs, systems, exponents, polynomials, factoring, rational expressions and equations, radicals, and word problems. Hourly time commitment per week: Class: 4, Reading: 1, Writing: 0, Studying: 2, Homework: 8. Homework assignments ask you to work 10-40 problems each class day. Testing includes daily checkpoints (one question mini-quizzes), several 50 minute closed-book exams and a two hour comprehensive final. Earning an A or B will prepare you for Calculators are allowed. Course prepares you for PsTL 1004 Statistics, PsTL 1006 College Algebra Through Modeling, 1031 College Algebra, and Math 1051 Precalculus I (all of which satisfy the CLE Mathematical Thinking requirement). If you need more review work you can take Intermediate Algebra, PsTL 0732 before attempting a college level math class.
Style: 30% Discussion, 70% Web Based. Computer-mediated instruction, working on problems, interacting with instructor.
Grading: 50% mid exam, 30% final exam, 10% quizzes, 10% written homework.
Exam Format: Algebra problems to solve (e.g. Solve this equation); Exams are closed book but calculators are allowed.

PsTL 732 Intermediate Algebra (Computer)
0 credit(s); 4 cr equiv or grade of at least C in [0713 or 0717 or 0721 or 0722] or General Math Placement Test credit will not be granted if credit received for: 0618, 0625, 0631, 0731, 1443, 1444, 1445, 1446 Credit will not be granted if credit has been received for: PSTL 731;
Instructor: Robertson, Douglas Frederick
PsTL 1004 Statistics: Understanding and Applying Data
4 credit(s); Meets CLE req of Mathematical Thinking
Instructor: Loch, Suzanne Yvette
Description: 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 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 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 1006 College Algebra through Modeling
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: 70% Lecture, 10% Laboratory, 10% Demonstration, 10% Web Based.
Grading: 20% final exam, 32% special projects, 10% quizzes, 8% written homework, 30% additional semester exams.

PsTL 1051 Editing for Writers
2 credit(s);
Instructor: Trites, Jill K
Description: Student may contact the instructor or department for information.

PsTL 1081 Integrated Learning in the Social Sciences
A-F only, 2 credit(s), max credits 4;
Instructor: Bovornusvakool, Witsinee
Description: Student may contact the instructor or department for information.
PsTL 1082 Integrated Learning in the Sciences
4 credit(s); A-F only, 2 credit(s), max credits 6, 3 completions allowed;
Instructor: Fox, Laura J
Description: The goals of PSTL 1082 are to help students (1) create their own understanding of some fundamental concepts in physics by working in a way similar to scientists, (2) use those physics concepts to understand environmental issues and develop solutions to environmental problems, and (3) develop skills for scientific argumentation, i.e., justifying a claim with evidence. Students will learn science through working in small groups to perform experiments, creating and refining explanatory models for how things work, and discussing their results with peers to develop consensus models. This process of making observations of experiments, developing models, and discussing the results with peers is the essence of what scientists do. Interwoven with the lab experience will be mini-lectures and other in-class activities in which students

PsTL 1163 Physics by Inquiry
4 credit(s); Meets CLE req of Environment; meets CLE req of Physical Sciences
Instructor: Hsu, Leon
Description: The goals of PSTL 1163 are to help students (1) create their own understanding of some fundamental concepts in physics by working in a way similar to scientists, (2) use those physics concepts to understand environmental issues and develop solutions to environmental problems, and (3) develop skills for scientific argumentation, i.e., justifying a claim with evidence. Students will learn science through working in small groups to perform experiments, creating and refining explanatory models for how things work, and discussing their results with peers to develop consensus models. This process of making observations of experiments, developing models, and discussing the results with peers is the essence of what scientists do. Interwoven with the lab experience will be mini-lectures and other in-class activities in which students

PsTL 1135 Essentials of Human Anatomy and Physiology
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 1112 Nature in the City
4 credit(s); Meets CLE req of Biological Sciences
Instructor: STAFF
Description: This is a one semester course, but rather a one semester survey course designed for

PsTL 1111 Principles of Biological Science
4 credit(s); Meets CLE req of Biological Sciences
Instructor: STAFF
Description: This is a one semester course, but rather a one semester survey course designed for
will see how the physics they are learning can be applied to understanding and solving problems related to environmental issues. Emphasis is placed on students knowing the evidence justifying their science knowledge, being able to apply that knowledge to novel situations, particularly those involving the natural environment, and being able to explain their reasoning.

**WHO SHOULD TAKE THIS COURSE?** This course is designed for students who (1) want a more hands-on science course, (2) are not necessarily confident in their ability to do science, and/or (3) are or are thinking of becoming elementary education majors. **WHO SHOULD NOT TAKE THIS COURSE?** Students who (1) have commitments that would cause them to miss or be late for class, (2) want to learn a lot of information about a lot of different topics in science, and/or (3) are not willing to work intensively with a group every day in class or to write a lot, should probably choose to take a different science course.

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

**Grading:** 20% mid exam, 10% final exam, 20% reports/papers, 15% quizzes, 25% written homework, 5% in-class presentation, 5% other evaluation.

**Exam Format:** Free response questions

**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:** Detzner, Dan

**Description:** Ways of Knowing in the Social Sciences enables students to utilize the social science disciplines as a multidisciplinary lens for understanding major local, national, and international issues. The course is offered as completely on-line (spring semester) or as a hybrid with mostly on-line assignments and a few face to face classes (summer session). We will explore the diverse ways that Economics, Political Science, History, Sociology, Anthropology, Psychology, and Geography construct evidence and present knowledge by studying the local/global dimensions of immigration and globalization. The course examines major ideas, theories, and perspectives from each discipline while building an interdisciplinary understanding of the diversity and social justice dimensions of human migration and globalization. Students will learn about and practice social science research and presentation skills. Students interested in teaching or majoring in the social sciences gain useful information for choosing a major and teaching in a multidisciplinary field of studies. With a focus on experiential learning, students in this course will develop an interdisciplinary way of thinking that can be used to understand other major social issues.

**Style:** 25% Lecture, 40% Discussion, 10% Laboratory. 6 self designed field trip

**Grading:** 20% reports/papers, 40% quizzes, 10% in-class presentation, 10% class participation, 20% other evaluation. self designed field trips

**Exam Format:** multiple choice, 10 questions

**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:** Woodbury, Shawn Michael

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

**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:** Stahl, Jason Michael

**Description:** I have three interrelated goals for this course -- to help you understand my interpretative frames for U.S. history since the Civil War; to help you develop your own interpretative frameworks of the same subject; and to help you better understand the discipline of History. Course will be focused on U.S. History from 1865 to the Present and will focus on critical readings of various primary and secondary source texts.

**Style:** 30% Lecture, 20% Film/Video, 50% Discussion.

**Grading:** 25% mid exam, 25% final exam, 30% reports/papers, 20% class participation.
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: Arendale, David R
Description: This Course Fulfills Two Graduation Requirements: CLE Diversified Core: Historical Perspectives CLE
Designated Theme: International Perspectives Textbook: None. Use free online articles and audio files
Course Overview: This course examines the 20th and 21st centuries to examine ideas that influenced development of global, political, social, and economic systems. This course explores world civilizations by placing historical events, customs and cultures in a global context. Use of historical documents, computer resources, historical simulations, texts, film documentaries, small group discussions, and lecture presentations are create a comprehensive view of major world cultures. This course provides a balanced exploration of world history during the past 100 years. The course develops major concepts such as nationalism, democracy, colonialism, liberalism, socialism, communism, and fascism while tracing their impact on Europe, Asia, Africa, and the Americas. Major questions include: What are the forces that guide history as it unfolds? How does today's news headlines connect with the past? Is it possible to predict the near future and make personal plans as a result? Exploring these questions helps to make sense out of history and connect "then and now." Current events include ethnic conflicts, the breakup of the Soviet Union, the modernization of Japan, China, and India, Arab/Israeli disputes, nation building in Africa, neo-colonialism and trade dependence in developing countries. Technology: The Moodle companion web site is the go to place for downloading readings, listening to audio files, and watching video files assigned to the class. There is no textbook to purchase. Instead, it has been replaced with free online materials. All critical course materials (study guides, lecture outlines, readings, information links) are available here. An additional feature of this course is integrating the use of blogs, wikis, and podcasting into the course. As a class we construct a weekly audio podcast that features a review of the history topics as well as include music selected by students. Check out the podcast at http://thenandnow.org It can be subscribed through iTunes. You can also sample the podcast by clicking on the web link on that web page. Also, the class will construct online its own study guide for the major exams. Check out the website at http://myworldhistory.org There are other history simulations and media activities we engage and use. Final Words History is all around us. We observe it as well as help to create it. The only way to study history is to hold your class notes in one hand and today's newspaper in the other. This class is about creating connections among what we read in class with today's newspaper headlines. It is about making sense out of a world that sometimes seems not to make very much sense at all. I hope that you decide to join us in the class.
Style: 45% Lecture, 15% Film/Video, 15% Discussion, 20% Small Group Activities, 2% Field Trips, 3% Web Based.
Grading: 20% mid exam, 20% final exam, 10% reports/papers, 10% special projects, 10% quizzes, 20% additional semester exams, 5% reflection paper, 5% class participation. Study guides for major exams created by students in the class and also provided by the course instructor. Also the course instructor and the enrolled students coproduce a weekly podcast that reviews the textbook chapter and class lectures.
Exam Format: Major exams have three parts: matching vocabulary, multiple-choice, and essay questions.

PsTL 1281 Principles of Psychology
4 credit(s); Have not received college credit for intro psych 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% attendance, 10% other evaluation. online practice quizzes
Exam Format: multiple choice

PsTL 1281 Principles of Psychology
4 credit(s); Have not received college credit for intro psych 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: Student may contact the instructor or department for information.

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,
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 critical viewer and creative participant. To that end, however, there is much overlap from other artistic mediums such as creative writing, visual art, movement, 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. 2-3 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); Credit will not be granted if credit has been received for: PSTL 1366; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature; meets CLE req of Writing Intensive
Instructor: Hyland, Ezra St
Description: Student may contact the instructor or department for information.

PsTL 1366 Stories of Self and Community: Multicultural Perspectives
3 credit(s); Credit will not be granted if credit has been received for: PSTL 1365W; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Literature
Instructor: Rojas Collins, Molly C
Description: This course uses a range of interactive activities and assignments to critically engage students with a variety of forms of literature that explore the diversity of experience and identity amongst individuals and communities in the United States. Through collaborative and interactive work with literary texts, students investigate the ways that literature works to illuminate power, privilege, and identity in society at the same time that it invites us to probe our own position and experience within that society. Students study formal elements of literature, the social and political contexts that shape and inform the literature, and consider their own experience in relation to these constructs. Through this work, students develop a deeper understanding of the meaning and function of literature as a way of engaging critical and creative perspectives on the human experience.
Grading: 40% mid exam, 40% reports/papers, 10% quizzes, 5% attendance, 5% in-class presentation.

PsTL 1366 Stories of Self and Community: Multicultural Perspectives
3 credit(s); 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, 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 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.

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 some of which take place outside of class meeting times.
PsTL 1366 Stories of Self and Community: Multicultural Perspectives
3 credit(s); Credit will not be granted if credit has been received for: PSTL 1367W; 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); 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, "Stories of Social Change: Global Perspectives," students will be introduced to short stories, poems, graphic (illustrated) stories, and novels from writers across the globe, written during this current century. We will also read essays, listen to music and view art and films that help us to understand the cultures, landscapes, economic 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. This section of PsTL1368 is entirely online with the exception of an initial meeting with the instructor and one planned literary event which will occur during the semester. The online learning will include one small group collaborative assignment, and will be engaged and student-centered.
Style: 10% Lecture, 5% Film/Video, 5% Discussion, 10% Small Group Activities, 10% Student Presentation, 60% Web Based. This is a hybrid course, which means it is a combination of face-to-face classes and online (web-based) classes.
Grading: 15% mid exam, 15% final exam, 10% reports/papers, 10% quizzes, 10% written homework, 10% attendance, 5% reflection paper, 15% in-class presentation, 10% class participation.

PsTL 1368 Stories of Social Change: Global Perspectives
3 credit(s); 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: Winters, Kelly T
Description: The texts of the class tell stories of young people who are leaving childhood and entering adulthood; they are coming-of-age? in different contexts and geographical areas, and coming to know some truths about themselves and the world that surrounds them. As we study these stories, we will work to understand who these young people are: what shapes them, what are their hopes and fears, what supports them and what impedes their growth. Some of the issues these young people face on their journeys may seem universal and easy to relate to. The desire to belong? to a family, to a group, or to a cause?is a familiar one to most readers. On the other hand, direct experience with war or revolution is a larger stretch of imagination for some readers. Some impulses you may find easy to relate to (like the desire to rebel against authority), while others may be born out of circumstances that seem, at least initially, far from your experience (like persecution on the basis of race or ethnicity).
Style: 20% Lecture, 5% Film/Video, 40% Discussion, 20% Small Group Activities, 10% Student Presentation, 5% Guest Speakers.
Grading: 20% mid exam, 20% final exam, 15% reports/papers, 20% journal, 15% in-class presentation, 10% class participation. All students may miss no more than three class sessions. If you anticipate having to miss more than three classes for any reason, speak to your adviser about registering for a class that does not penalize poor attendance.
Exam Format: Closed book, multiple-choice and short answer exams in class. Take-home essay questions.

PsTL 1368 Stories of Social Change: Global Perspectives
3 credit(s); 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: 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 1461 Multicultural Perspectives in Public Speaking
PsTL 1461 Multicultural Perspectives in Public Speaking

3 credit(s); 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: Dorsey, Heather Jane

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. This course also meets the CLE Theme of Civic Life and Ethics. * Please note: class focus will be on Environmental/Sustainability Issues as a point of general conversation, research, and for two major speeches. No prior knowledge is this field required.

Style: 15% Lecture, 5% Film/Video, 15% Discussion, 20% Small Group Activities, 40% Student Presentation, 5% Web Based.

Grading: 19% final exam, 3% quizzes, 18% written homework, 7% attendance, 48% in-class presentation, 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: Hodne, Barbara Downs

Description: JUSTICE ISN'T JUST US Justice requires thinking carefully, treating everyone fairly and protecting everyone's rights. But what does it take to achieve justice if "everyone" includes people with different ideas, perspectives, world views, cultures, races or ethnicities. How do you respect the rights of all? In this class we will think critically about what fair treatment and just actions require. We'll compare our own world views with other people's perspectives; we'll evaluate facts, concepts and values that guide people's actions; and we'll decide what actions make a difference to create a more just world. Reading this year's common book, Outcasts United, we will explore the forces that bring refugees to the U.S. and the challenges that a small town in Georgia faced in welcoming large numbers of refugees. Our final assignment will be a collaborative group project in which students research the work of a group that is acting toward justice in ways that the students believe in and support.

Style: 25% Lecture, 4% Film/Video, 40% Discussion, 20% Small Group Activities, 10% Student Presentation, 1% Guest Speakers.

Grading: 65% reports/papers, 10% written homework, 20% class participation, 5% other evaluation. Advising component: attend six advising workshops and one individual meeting with advisor.

PsTL 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing

A-F only, 4 credit(s); Meets CLE req of Writing Intensive
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, 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 the common book; and to get lots of practice writing persuasively in an academic setting.
Style: 20% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 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: 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 get 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:** JUSTICE ISN'T JUST US Justice requires thinking carefully, treating everyone fairly and protecting everyone's rights. But what does it take to achieve justice if "everyone" includes people with different ideas, perspectives, world views, cultures, races or ethnicities. How do you respect the rights of all? In this class we will think critically about what fair treatment and just actions require. We'll compare our own world views with other people's perspectives; we'll evaluate facts, concepts and values that guide people's actions; and we'll decide what actions make a difference to create a more just world. Reading this year's common book, Outcasts United, we will explore the forces that bring refugees to the U.S. and the challenges that a small town in Georgia faced in welcoming large numbers of refugees. Our final assignment will be a collaborative group project in which students research the work of a group that is acting toward justice in ways that the students believe in and support.

**Style:** 25% Lecture, 4% Film/Video, 40% Discussion, 20% Small Group Activities, 10% Student Presentation, 1% Guest Speakers.

**Grading:** 65% reports/papers, 10% written homework, 20% class participation, 5% other evaluation. Advising component: attend six advising workshops and one individual meeting with advisor.

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?7s 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 1525V First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Hodne,Barbara Downs
Description: JUSTICE ISN'T JUST US Justice requires thinking carefully, treating everyone fairly and protecting everyone's rights. But what does it take to achieve justice if "everyone" includes people with different ideas, perspectives, world views, cultures, races or ethnicities. How do you respect the rights of all? In this class we will think critically about what fair treatment and just actions require. We'll compare our own world views with other people's perspectives; we'll evaluate facts, concepts and values that guide people's actions; and we'll decide what actions make a difference to create a more just world. Reading this year's common book, Outcasts United, we will explore the forces that bring refugees to the U.S. and the challenges that a small town in Georgia faced in welcoming large numbers of refugees. Our final assignment will be a collaborative group project in which students research the work of a group that is acting toward justice in ways that the students believe in and support.

Style: 25% Lecture, 4% Film/Video, 40% Discussion, 20% Small Group Activities, 10% Student Presentation, 1% Guest Speakers.
Grading: 65% reports/papers, 10% written homework, 20% class participation, 5% other evaluation. Advising component: attend six advising workshops and one individual meeting with advisor.

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: Energy...Illuminated! Energy makes things happen. In a scientific sense, converting fuel into energy enables our work, our leisure activities, and our use of everyday manufactured objects. Failing resources and rising pollution, however, require societies to consider using energy in more sustainable ways. In a humanistic sense, energy defines our lives' actions. High energy people attack life with unstoppable enthusiasm. Nontraditional healers use energy pathways in our bodies to improve well-being. People from distinct religious traditions report drawing strength and guidance from the energy of a higher spirit. Students in this class will study the concept of energy from a wide range of perspectives informed by the disciplines of physics, psychology, anthropology and mathematics. As we read Prisoner of Tehran, we will explore the theme of forgiveness as a type of social energy. Can individuals and political entities realistically establish social harmony through forgiveness? In their capstone project, students will be asked to use both science and humanistic interpretations as they answer the question, "How does attention to energy enable people to make a difference?"

PsTL 1525W First-Year Inquiry: Multidisciplinary Ways of Knowing
A-F only, 4 credit(s);Meets CLE req of Writing Intensive
Instructor: Cory,Kris
Description: All PSTL 1525W classes share the following common features: small classes taught by one instructor that meet twice a week and large Friday team-taught classes, a guiding question How can one person make a difference?, a common book, and a core iPad project. While each section of the course explores the common question through different means, all FYI students will read the book The Other Wes Moore and attend two common book events: a panel discussion on the pathways for youth (Friday, October 26 at 9:45 in the McNamara Alumni Center) and a public talk with the author Wes Moore (Tuesday, October 30 at 7pm at the Ted Mann Concert Hall). Students will work collaboratively on an
assignment using the iPad to demonstrate learning and development outcomes. You will volunteer in at a local community organization that supports youth for 20 hours during this semester. This service learning is central to this course. We chose to put this service requirement at the center of the course for a number of reasons: to help connect University students to local communities, to relate the academic content of the course to the real world, and to provide a concrete experience to help us answer the question How Can One Person Make a Difference? in a deep and meaningful way. As you engage in community service over the semester, you will also read The Other Wes Moore and study how a variety of scholars from different fields have grappled with questions of inequality, adversity and resilience in different realms of life in America: in schools, in the legal system, in families, neighborhoods and housing, and in employment. What are the challenges that young people from disadvantaged backgrounds face growing up in the United States -- and in the Twin Cities -- today? How should we respond? Obviously, in our class we hope you learn new content that is, we hope you learn new things about the relationship of individuals and communities to major social institutions in the United States, how institutions support or fail to support individual and community growth and development. We hope you will explore new ideas related to your own identity and social relationships, and that the service component of the course will broaden and deepen your perspective and response to the world you live in. Ultimately, we believe this will make a positive difference in your own development and college career. An integral part of the content and experience of the course is how you learn to think, read, write and interact in new ways. We want you to leave this class with a better understanding of what it means to think, write, and read in a university setting. We want you to be able to critically examine the arguments contained in academic writings; to apply those arguments to your own experience and to the common book; and to get lots of practice writing persuasively in an academic setting.

**Style:** 20% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation, 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 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:** 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:** Staats, Susan K

**Description:** Energy...Illuminated! Energy makes things happen. In a scientific sense, converting fuel into energy enables our work, our leisure activities, and our use of everyday manufactured objects. Failing resources and rising pollution, however, require societies to consider using energy in more sustainable ways. In a humanistic sense, energy defines our lives' actions. High energy people attack life with unstoppable enthusiasm. Nontraditional healers use energy pathways in our bodies to improve well-being. People from distinct religious traditions report drawing strength and guidance from the energy of a higher spirit. Students in this class will study the concept of energy from a wide range of perspectives informed by the disciplines of physics, psychology, anthropology and mathematics. As we read Prisoner of Tehran, we will explore the theme of forgiveness as a type of social energy. Can individuals and political entities realistically establish social harmony through forgiveness? In their capstone project, students will be asked to use both science and humanistic interpretations as they answer the question, "How does attention to energy enable people to make a difference?"
PsTL 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, wildcard search and replace, tables, graphics, cross-references, headers, footnotes, and indexes), using an electronic spreadsheet to analyze data (including formulas, IF/THEN/ELSE, LOOKUP, SUMIFS, different types of graphs, data validation, 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 covered. 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 2013 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: The Science and Politics of Genetics and Reproduction is a seminar course where students read, discuss, debate, and generally engage with a myriad of issues surrounding the science of genetics and the application of revolutionary technologies to human reproduction. Students will explore topics and controversies relating to the past, present, and future of human sexual activity and human reproduction, and how reproductive technologies (such as in vitro fertilization) have helped shape our modern society. Birth control technologies will be related to a long and troubling history of eugenics, which includes legal events such as mandatory sterilization laws, and the impact of "the Pill" on society (from individual women and families to large institutions such as the Catholic Church and the US Government). Through the use of both fiction and non-fiction literature, students will learn the details of current scientific breakthroughs such as ?designer babies.? This course aims to engage students in an exploration of their personal beliefs about the roles of science, the government, and even religious institutions on human reproductive rights.
Style: 10% Lecture, 50% Discussion, 40% Small Group Activities.
Grading: 50% mid exam, 30% final exam, 20% reports/papers.

PsTL 3324W Writing in the Workplace for Education and Human Development Majors
4 credit(s); Meets CLE req of Writing Intensive
Instructor: Buturian, Linda J
Description: Student may contact the instructor or department for information.

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.
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.

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**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.

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**PsTL 5106 Multicultural Teaching and Learning in Diverse College Contexts**

A-F only, 3 credit(s);

**Instructor:** Duranczyk, Irene Mary

**Description:** We will analyse agency and praxis in our histories, present day experiences and in the context of teaching, learning, and student development. This course will explore theory and pedagogy as they relate to culturally responsive teaching/learning in postsecondary settings. In addition while investigating diverse and multiple social identities with a variety of learning styles, course topics will include Critical Multicultural Education (CME), Social Justice Education (SIJ), Universal Instructional Design (UID), Integrated Multicultural Instructional Design (IMID), problem-based learning, inquiry-based teaching, and other models for ensuring engagement and inclusion.

**Style:** 60% Discussion, 30% Small Group Activities, 10% Student Presentation.

**Grading:** 50% special projects, 10% written homework, 5% journal, 10% reflection paper, 25% in-class presentation.

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**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.

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**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.

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**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.

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**Preventive Science Minor**

**Institute of Child Development**

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**Prev 8005 Prevention Science Capstone Course**

OPT No Aud, 1 credit(s);

**Instructor:** Gewirtz, Abigail

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

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**Product Design**

101 Rapson Hall
PDes 3701 Creativity, Idea Generation, and Innovation
A-F only, 3 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 first 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, 3 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 second 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 tool set 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: STAFF
Description: This is an introduction to physical 3D model making and prototyping techniques with a clear emphasis on creating objects by hand. Students will work through a variety of material explorations in a series of 3 main projects designed to develop students' understanding of form, volume and line. Materials range from Bristol paper and polyurethane foam to wood and acrylic. Students will have both guided and open-ended design opportunities that build on skills learned throughout the semester. Each week's classes will be split between time spent in lecture covering new technique demonstrations, topic development and design inspiration and labs where students will have hands-on time to experiment with materials and work on projects. One-on-one consultations will also take place on lab days.
Style: 50% lecture and 50% lab/studio/shop
Grading: 25% each for 3 projects to equal 75%; remaining 25% divided among class participation, critique participation, and sketchbook development.
Exam Format: No exams; exam days used for final presentations.

PDes 3715 Design and Food
A-F only, 4 credit(s);
Instructor: Kudrowitz, 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. Mondays are lectures and restaurant outings and Wednesdays are hands-on labs.
Style: 20% Lecture, 50% Laboratory, 15% Demonstration, 15% Guest Speakers.
Grading: 80% special projects, 10% journal, 10% class participation.

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, 3 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, 3 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: STAFF
Description: This is an introduction to physical 3D model making and prototyping techniques with a clear emphasis on creating objects by hand. Students will work through a variety of material explorations in a series of 3 main projects designed to develop students' understanding of form, volume and line. Materials range from Bristol paper and polyurethane foam to wood and acrylic. Students will have both guided and open-ended design opportunities that build on skills learned throughout the semester. Each week's classes will be split between time spent in lecture covering new technique demonstrations, topic development and design inspiration and labs where students will have hands-on time to experiment with materials and work on projects. One-on-one consultations will also take place on lab days.
Style: 50% lecture; 50% lab/studio/shop.
Grading: 25% for each of 3 projects to equal 75%; 25% divided among class participation, critique participation, and sketchbook development.
Exam Format: No exams; exam days used for final presentations.

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.

Prosthodontics 9-450 MoosT

Pros 7110 Classic Prosthodontic Literature Review
A-F only, 2 credit(s);
Instructor: Hollan, 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.
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: The section offered through Online and Distance Learning (ODL), College of Continuing Education is no longer offered.
Style: Online
Grading: See attached syllabus
Exam Format: Online exam

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: What is the Human Mind
A-F only, 3 credit(s), max credits 6;
Instructor: Marsolek, Chad James
Description: Student may contact the instructor or department for information.

Psy 1905 Freshman Seminar: The Psychology of Working Women
A-F only, 3 credit(s), max credits 6;
Instructor: Kling, Kristen C
Description: Student may contact the instructor or department for information.

Psy 1905 Freshman Seminar: This is Your Brain on Drugs
A-F only, 3 credit(s), max credits 6;
Instructor: Burwell, Scott
Description: Student may contact the instructor or department for information.

Psy 1905 Freshman Seminar: Psychology of Eating
A-F only, 3 credit(s), max credits 6;
Instructor: Mann, Traci Lynn
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: Brothen, Thomas
Description: Psy 3011: Introduction to Learning and Behavior is taught as a mastery learning, self-paced, fully online course. This will include 13 chapter textbook (from Mazur, 7ed) reading assignments of approximately 25 pages each supported by a study guide and lecture notes. You will use interactive modules on Moodle to master the chapter content. Once you have achieved mastery, you will take a chapter quiz. The final step each week will be a short practical application writing assignment based on the chapter. The writing assignments will have due dates each week. You can work ahead on all assignments and do everything EXCEPT the writing assignments after the writing deadlines. The final exam will be delivered online to students through Proctor U (see https://proctoru.com/howitworks.php for information) and on-campus times will also be available. The Course Catalogue description (Methods/findings of research on learning and behavior change; Twentieth-century theoretical perspectives, including contemporary models; emphasizes animal learning and behavioral psychology.) is very concise but describes the purpose of this course quite well. The major goal is to provide you with a foundation in what psychologists know about learning and how it is conceptualized, studied, and applied. You will encounter lots and lots of facts. Once you master them, you will find them very useful. But mastering them is challenging and the course structure is designed to help you do that. The grading will be generally as follows. Interactive mastery activities (one on terminology, one on factual material, unlimited attempts with different items each time, best score counts, available until the end of the semester): 28%; Final chapter quizzes (multiple choice, best of 3 attempts with items randomly drawn from a large pool, available until the end of the semester): 40%; Application writing assignments for each chapter (weekly due dates): 12%; Final Exam (multiple choice, closed book/notes, several available dates including early final times on ProctorU): 20%.

Psy 3031 Introduction to Sensation and Perception
3 credit(s);
Instructor: Engel, Stephen A
Description: This hybrid course with on-line lectures and in person demo/lab sessions covers basic information about human sensation and perception. Students will learn 1) how the human body turns different physical stimuli into neural impulses (sensation), and 2) how the brain receives and interprets these impulses (perception). Required text: Goldstein, E. B. (2010). Sensation and Perception, 8th edition.
Style: 10% Lecture, 50% Small Group Activities, 40% Demonstration.

Psy 3051 Introduction to Cognitive Psychology
3 credit(s);
Instructor: Jiang, Yuhong Vanessa
Description: Welcome! Cognitive psychologists explore the nature of cognitive processes such as attention, memory, concept, reasoning, perception, and language processing. Our goal is to understand how the mind works, and how the brain works to produce such a mind. This course will introduce you to some of the major tools, assumptions, and theories from a cognitive and cognitive-neuroscience perspective, and expose you to some of the more important results obtained thus far. Student evaluation from past years has been overwhelmingly positive.
Style: 85% Lecture, 5% Film/Video, 10% Laboratory.
Psy 3061 Introduction to Biological Psychology
3 credit(s); 1001 or BIOL 1009 or NSci 1100 Credit will not be granted if credit has been received for: PSY 5061;
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.
Grading: 75% mid exam, 25% final exam. 3 mid term exams

Psy 3101 Introduction to Personality
3 credit(s); 1001 Credit will not be granted if credit has been received for: PSY 5101;
Instructor: Grazioplene, Rachael Grace
Description: Student may contact the instructor or department for information.

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: Carey, Bridget E
Description: Student may contact the instructor or department for information.

Psy 3201 Introduction to Social Psychology
3 credit(s);
Instructor: Dwyer, Patrick
Description: Student may contact the instructor or department for information.

Psy 3206 Introduction to Health Psychology
3 credit(s);
Instructor: Wagner, Heather Marie
Description: Student may contact the instructor or department for information.

Psy 3301 Introduction to Cultural Psychology
A-F only, 3 credit(s);
Instructor: Ajayi, Alex
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: Walker, Lovey H
Description: Student may contact the instructor or department for information.

Psy 3512 Principles of Abnormal Psychology
A-F only, 3 credit(s);
Instructor: Dunbar, Robert Lee
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: Klimes-Dougan, Bonnie
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; PSY 5604H
Instructor: Lissek, Shmuel
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; PSY 5604H
Instructor: Cooper, Sam
Description: Student may contact the instructor or department for information.

Psy 3617 Introduction to Clinical Psychology
3 credit(s);
Instructor: Grove, William Merrill
Description: Target audience: mostly majors, who must have taken Psy 3604 (Abnormal Psychology) or equivalent. 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, then outlines training programs (including how to get into graduate school, and what programs are like once one gets in). The rest of 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. Main text: Trull's Introduction to Clinical Psychology. Students also read about a dozen empirical research articles in a reading packet. The course is lecture and discussion format. Exams include a mid-term and a final, non-cumulative in coverage and having equal weight. Students usually consider the exams in this course fairly difficult.
Style: 80% Lecture, 20% Discussion.
Grading: 66% mid exam, 33% final exam. Actually 33% on final; and 33% each of 2 mid-semester exams
Exam Format: multiple choice

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 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: Nichol, Penny E
Description: Student may contact the instructor or department for information.
Psy 3801H Honors Introduction to Psychological Measurement and Data Analysis
A-F only, 4 credit(s); [1001 or equiv], high school algebra, honors; intended for students who plan to major in psychology. Credit will not be granted if credit already received for: Psy 2801 or Psy 2801H [1001 or equiv], high school algebra, honors; intended for students who plan to major in psychology. Credit will not be granted if credit has been received for: PSY 3801; Meets CLE req of Mathematical Thinking
Instructor: Nichol, Penny E
Description: Student may contact the instructor or department for information.

Psy 3901W Major Project - Research Laboratory
A-F only, 3 credit(s); [3801 or equiv], 3001W, completion of five courses from three distribution areas, PSY major, senior
Credit will not be granted if credit has been received for: PSY 3902W; Meets CLE req of Writing Intensive
Instructor: Niccoli-Waller, Caprice
Description: Student may contact the instructor or department for information.

Psy 3902W Major Project - Individual Interests
A-F only, 3 credit(s); [3801 or equiv], [3001W], completion of five courses from three distribution areas, PSY major, sr
Credit will not be granted if credit has been received for: PSY 3901W; 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 3903W Major Project - Community Engagement
A-F only, 3 credit(s); [3801 or equiv], [3001W], completion of five courses from three distribution areas, PSY major, senior
Credit will not be granted if credit has been received for: PSY 3902W; Meets CLE req of Writing Intensive
Instructor: Niccoli-Waller, Caprice
Description: Student may contact the instructor or department for information.

Psy 3960 Undergraduate Seminar in Psychology
1-5 credit(s), max credits 45, 9 completions allowed;
Instructor: Frazier, Patricia Ann
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 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 include: tonality and rhythm, cognitive neuroscience of music, comparative and developmental studies of music perception, music and emotion.
Grading: 20% mid exam, 30% final exam, 25% reports/papers, 20% quizzes, 5% attendance.

Psy 4036 Perceptual Issues in Visual Impairment
3 credit(s);
Instructor: Legge, Gordon Ernest
Description: This course applies contemporary research findings to an improved understanding of the real-world abilities of visually disabled people. Topics will include prevalence of low-vision and blindness; three Dimensions of Vision Loss (acuity, contrast sensitivity, and visual field); auditory and tactile perception; brain-imaging studies; reading and low vision; Braille reading; synthetic speech; adaptive technology for reading; space perception; navigational technology (ranging from canes to GPS); driving with low vision; object recognition and face recognition; adaptive technology for computer access; and recreational activities. Each class session will be divided between lecture and hands-on lab exercises with state-of-the-art adaptive technology. The course is designed for a variety of audiences including psychology majors, students with vision disabilities, students with career interests in rehabilitation or eye care (special education, occupational therapy, physical therapy, pre-optometry, pre-med, or nursing), and for professionals with related interests such as special education. This course will be web enhanced. For an example see the Fall 2008 website.

Style: 40% Lecture, 20% Discussion, 40% Laboratory.
Grading: 20% mid exam, 20% final exam, 35% reports/papers, 25% laboratory evaluation.
Exam Format: Short factual answers and short essays.

Psy 4501 Psychology of Women and Gender
3 credit(s);
Instructor: Bermingham, Therese
Description: Student may contact the instructor or department for information.

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 5038W Introduction to Neural Networks
3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kersten, Daniel John
Description: Student may contact the instructor or department for information.

Psy 5054 Psychology of Language
3 credit(s);
Instructor: Fletcher, Charles R
Description: Theories/experimental evidence in past and present conceptions of psychology of language. Topics include language and the brain, perceptual processes in reading, speech perception, lexical access, semantic memory, sentence and discourse comprehension, pragmatics, speech production, composition, language and thought and applied psycholinguistics.
Style: 100% Lecture.
Grading: 60% mid exam, 40% final exam.
Exam Format: multiple choice, operational definitions, essay

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 5064 Brain and Emotion
A-F only, 3 credit(s);
Instructor: Gewirtz, Jonathan C
Description: Student may contact the instructor or department for information.
Psy 5136 Human Abilities
3 credit(s);
Instructor: Kuncel, Nathan Richard
Description: Student may contact the instructor or department for information.

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 5204 Psychology of Interpersonal Relationships
A-F only, 3 credit(s);
Instructor: Simpson, Jeffry A
Description: Student may contact the instructor or department for information.

Psy 5707 Personnel Psychology
4 credit(s); ([3001W or equiv], 3711) or instr 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
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: Research topics include clinical judgment and actuarial data combination, philosophy of statistics and scientific theory testing, and classification of the major psychiatric disorders (including categorical vs. dimensional models). Research on taxometrics (a robust form of multivariate mixture modeling) is also featured.
Grading: 100% reports/papers.
Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: MacDonald III, Angus
Description: The TRI-CAM 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: Stellmack, Mark 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: 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: Viemeister, Neal F
Description: This course is an introduction to research in human auditory perception intended for undergraduate and graduate students. The format is a combination of lecture, seminar, and lab. Students will participate in lectures and discussions of principles of auditory perception and research design in psychoacoustics. Students will design and perform an experiment that may be used to prepare a manuscript to satisfy PSY 3902W requirements. The experiments will be closely related to the active research being conducted in the Psychoacoustics Lab (http://www.psych.umn.edu/psylabs/acoustic/). The major goal of this course is to give students an opportunity to engage in hands-on research and to acquire expertise in the various dimensions of research, including design, data collection, data analysis, laboratory skills, background scholarship, and scientific communication. Among the students' requirements for this course: attend and participate in discussions, prepare an oral presentation of the student's research, and prepare a proposal for future research based on the student's research or other recent, published research in psychoacoustics. Although not required, it is preferred that students have taken PSY 3001W (Research Methods), PSY 3031 (Sensation and Perception), PSY 3051 (Cognitive), and/or PSY 3061 (Biological Psychology) and that students are comfortable with math and quantitative analysis.
Style: 20% Lecture, 40% Discussion, 30% Laboratory, 10% Student Presentation.

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;
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: Snyder, Mark
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Fletcher, Charles R
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Schrater, Paul Robert
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: He, Sheng
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Krueger, Robert
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Gewirtz, Jonathan C
Description: Student may contact the instructor or department for information.

Psy 5993 Research Laboratory in Psychology
3 credit(s), max credits 18, 6 completions allowed;
Instructor: Gewirtz, Abigail
Description: Student may contact the instructor or department for information.
3 credit(s), max credits 18, 6 completions allowed;  
**Instructor:** Lee, Richard M  
**Description:** This directed research is designed for undergraduate and graduate students interested in the role of race, ethnicity, and culture in the development and well-being of individuals and families from diverse racial and ethnic backgrounds with a particular focus on adopted individuals and families and children of immigrant parents.  
**Style:** 20% Discussion, 80% Laboratory. Students are expected to attend a weekly lab group meeting and reading group.

**Psy 5993 Research Laboratory in Psychology**  
3 credit(s), max credits 18, 6 completions allowed;  
**Instructor:** Federico, Christopher Michael  
**Description:** Student may contact the instructor or department for information.

**Psy 5993 Research Laboratory in Psychology**  
3 credit(s), max credits 18, 6 completions allowed;  
**Instructor:** Koutstaal, Wilma  
**Description:** Student may contact the instructor or department for information.

**Psy 5993 Research Laboratory in Psychology**  
3 credit(s), max credits 18, 6 completions allowed;  
**Instructor:** Klimes-Dougan, Bonnie  
**Description:** Students will become involved in applied research experiences that involve work with depressed adolescents.  
**Style:** 10% Lecture, 90% Laboratory.  
**Grading:** 15% reports/papers, 10% class participation, 75% laboratory evaluation.

**Psy 5993 Research Laboratory in Psychology**  
3 credit(s), max credits 18, 6 completions allowed;  
**Instructor:** Lee, James 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:** 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;  
**Instructor:** Engel, Stephen A  
**Description:** Engel lab research/lab meeting

**Psy 5993 Research Laboratory in Psychology**  
3 credit(s), max credits 18, 6 completions allowed;
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: Lissek, Shmuel
Description: Student may contact the instructor or department for information.

Psy 8042 Proseminar in Cognition, Brain, and Behavior
A-F only, 3 credit(s);
Instructor: Koutstaal, Wilma
Description: Student may contact the instructor or department for information.

Psy 8061 Neuropsychopharmacology
A-F only, 3 credit(s); 5xxx coursework in biological psych or neuroscience or pharmacology or instr consent Credit will not be granted if credit has been received for: CMB 8208;
Instructor: Roy, Sabita
Description: This course addresses the role of specific neurotransmitter systems in mental illness and drug addiction, a field of almost exponential growth in research over the past two decades. The first part of the course provides an overview of the structure and function of the nervous system from a neuropharmacological perspective. The second part deals with methods typically employed in neurobehavioral pharmacology. The final, and most extensive, portion of the course examines the neuropharmacological basis of several broad categories of mental illness including mood disorders, schizophrenia, and autism, with particular emphasis on drug addiction.
Style: 50% Lecture, 25% Discussion, 25% Student Presentation.

Psy 8061 Neuropsychopharmacology
A-F only, 3 credit(s); 5xxx coursework in biological psych or neuroscience or pharmacology or instr consent Credit will not be granted if credit has been received for: CMB 8208;
Instructor: Gewirtz, Jonathan C
Description: This course addresses the role of specific neurotransmitter systems in mental illness and drug addiction, a field of almost exponential growth in research over the past two decades. The first part of the course provides an overview of the structure and function of the nervous system from a neuropharmacological perspective. The second part deals with methods typically employed in neurobehavioral pharmacology. The final, and most extensive, portion of the course examines the neuropharmacological basis of several broad categories of mental illness including mood disorders, schizophrenia, and autism, with particular emphasis on drug addiction.
Style: 50% Lecture, 25% Discussion, 25% Student Presentation.

Psy 8111 Biological, Cognitive, Affective, Social, Developmental and Historical Aspects of Psychopathology
A-F only, 4 credit(s);
Instructor: Vachon, David
Description: Student may contact the instructor or department for information.

Psy 8204 Social Psychology of Prejudice and Intergroup Relations
A-F only, 3 credit(s);
Instructor: Federico, Christopher Michael
Description: Student may contact the instructor or department for information.

Psy 8205 Principles of Social Psychology
3 credit(s), max credits 15, 5 completions allowed;
Instructor: Gonzales, Marti Hope
Description: Student may contact the instructor or department for information.

Psy 8210 Law, Race, and Social Psychology
A-F only, 3 credit(s);
Instructor: Borgida, Eugene
Description: Student may contact the instructor or department for information.
Psy 8211 Proseminar in Political Psychology I
S-N only, 1 credit(s); Political Psychology grad minor
Credit will not be granted if credit has been received for: POL 8307;
Instructor: Federico, Christopher Michael
Description: Student may contact the instructor or department for information.

Psy 8503 Interviewing and Intervention
3 credit(s);
Instructor: Lee, Richard M
Description: Student may contact the instructor or department for information.

Psy 8510 Counseling Psychology Beginning Practicum: General
S-N only, 1-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Hansen, Jo-Ida C
Description: Student may contact the instructor or department for information.

Psy 8514 University Counseling Practicum I
S-N only, 4-6 credit(s), max credits 6, 1 completion allowed;
Instructor: Tu, Chia-Chen
Description: Student may contact the instructor or department for information.

Psy 8542 Professional Standards and Ethics in Clinical 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, 1-3 credit(s), max credits 3, 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 Intellectual and Neuropsychological Assessment: Measurement, Methodology, and Development
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 Intellectual and Neuropsychological Assessment: Measurement, Methodology, and Development
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 Practicum: Consultation, Supervision, Professional Standards, and Lifelong Learning
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 Crisis Intervention, Professional Consultation, and Community Psychology
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 8814 Analysis of Psychological Data
4 credit(s);
Instructor: Nydick, Steven Warren
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: Frazier, Patricia Ann
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: Olman, Cheryl Annette
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

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 1301W; Meets CLE req of Writing Intensive
Instructor: Christopherson, Christen Ruth
Description: This introductory level course presents leadership using a personal leadership perspective and framework. 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 effective leadership 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 1301W; Meets CLE req of Writing Intensive
Instructor: Porter II, Louis
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 1301W; Meets CLE req of Writing Intensive
Instructor: Reile, Lucy
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 1301W; Meets CLE req of Writing Intensive
Instructor: Russell, Kathrine Anna
Description: Student may contact the instructor or department for information.

PA 1961W Personal Leadership in the University
A-F only, 3 credit(s); Credit will not be granted if credit has been received for: OLPD 1301W; Meets CLE req of Writing Intensive
Instructor: Thomas-Card, Traci Lee
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 1301W; Meets CLE req of Writing Intensive
Instructor: Lahr, Lindsey Elizabeth
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 1301W; Meets CLE req of Writing Intensive
Instructor: Marcy, Ben
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 1301W; Meets CLE req of Writing Intensive
Instructor: Taylor Jr, Leonard
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 1301W; Meets CLE req of Writing Intensive
Instructor: Larson, Amanda A
Description: This introductory level course presents leadership using a personal leadership perspective and framework. 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 effective leadership 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 1301W; Meets CLE req of Writing Intensive
Instructor: Digby PhD, Cynthia LB
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 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 1301W; 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.

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 1301W; Meets CLE req of Writing Intensive**

**Instructor:** Shelley, Laura Catherine

**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 1301W; Meets CLE req of Writing Intensive**

**Instructor:** Chung, Jessica

**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 1301W; 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. 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 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 1301W; Meets CLE req of Writing Intensive**

**Instructor:** McManimon, Shannon

**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 1301W; Meets CLE req of Writing Intensive**

**Instructor:** Heineman, Colby

**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 1301W; Meets CLE req of Social Sciences
Instructor: Routman, Sarah Lynn
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 methods, 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 valuation, presentation techniques and implementation strategies. A technology-facilitated, flexible learning model allows students to complete convenient online tutorials 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. 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. The diverse selection of case studies include such current topics as sports stadiums, teenage driving restrictions, housing assistance, on-campus parking, light rail transit, missing children, movie ratings, plastic bag taxation, substance abuse, lakefront and downtown development.
Style: 5% Lecture, 10% Discussion, 50% Small Group Activities, 5% Student Presentation, 30% Web Based. In this "flipped classroom," students compete online tutorials at their convenience. These lessons are reinforced in class with exercises done in small teams. The course generally follows a format in which one topic is covered each week.
Grading: 40% special projects, 35% written homework, 10% class participation, 15% problem solving. The total grade consists of 35 percent individual and 40 percent small team graded homework, 15 percent ungraded team homework completed in class, and 10 percent participation, which is determined by timely completion of online lessons.
Exam Format: There are no exams.

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 basic concepts and collaborative methods for team project and budget planning, program analysis, interpreting financial reports, identifying and resolving organizational performance issues. A technology-facilitated, flexible learning model provides students with the hands-on participatory tools they need to compete in the new economy. Students complete convenient online tutorials 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: "I understand the material better in this class than in any other class that I have taken at the U. The flipped version is more effective at making me understand the material than the traditional lecture method. The fact that the professors are close by when doing the assignments is very helpful . . . This 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: 5% Lecture, 10% Discussion, 50% Small Group Activities, 5% Student Presentation, 30% Web Based. In this "flipped classroom," students compete online tutorials at their convenience. These lessons are reinforced in class with exercises done in small teams. Tutorial assistance is also available as students take responsibility for their learning.
Grading: 15% mid exam, 15% final exam, 20% special projects, 35% written homework, 15% class participation. Participation points are determined by timely completion of online lessons and class attendance, where students collaboratively complete case studies, 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: Soria, Krista Marie
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: Rau, Elizabeth A
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: Harris, Margaret McKenny
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 3302
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 3991 Independent Study**
1-3 credit(s), max credits 6;
Instructor: Boyte, Harry C
Description: Student may contact the instructor or department for information.

**PA 4101 Nonprofit Management and Governance**
3 credit(s);
Instructor: Rojas, Allison Langell
Description:

**PA 4200 Urban and Regional Planning**
3 credit(s);
Human Rights and Humanitarian Challenges for Policy Makers and Practitioners

This course, which will involve lecture and class discussion, will examine the issues and institutions that relate to humanitarian challenges and humanitarian suffering around the world. The course will focus on international humanitarian organizations and governments in the United States to address humanitarian challenges. The course will also examine 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. The course will cover 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: 30% Lecture, 25% Discussion, 25% Small Group Activities, 10% Guest Speakers, 10% Service Learning.

Grading: 20% mid exam, 25% reports/papers, 35% special projects, 10% reflection paper, 10% class participation. Special project is small group comprehensive plan, broken out as follows: 10% report contribution, 10% group product, 10% jury score 5% peer evaluation

Exam Format: In class: multiple choice, short answer and essay

PA 4890 Topics in Global Policy: Managing Global Crises

3 credit(s), max credits 6;
Instructor: Schwartz, Eric Paul
Description: Managing Global Crises: Human Rights and Humanitarian Challenges for Policy Makers and Practitioners
Mondays, 6 pm to 8:45 pm, Blegen 215 (Offered as PA 4890/GLOS 5900/POL 5810/PA 8890) Humphrey School Dean Eric Schwartz will be teaching this course. Dean Schwartz served in the White House and the State Department in the Clinton and Obama Administrations, as well as the United Nations and with Human Rights Watch. From Syria and Iraq to Somalia and Sudan, man-made disasters, which principally impact populations in the developing world, pose compelling challenges to the capacities of governments and international organizations to prevent and alleviate suffering and promote recovery. Moreover, especially after 9/11, the complex crises that result in humanitarian suffering became the focus of serious concern among policy-makers and practitioners in the United States, who began to view effective responses as important in avoiding political instability and state failure. This course, which will involve lecture and class discussion, will examine the efforts of the international community?governments, international organizations, non-governmental organizations (NGOs) and others -- to respond to humanitarian, recovery and reconstruction challenges posed by man-made disasters that impact civilians. (We will also consider disasters related to natural hazards, like storm surges and hurricanes, though those will not be a major focus of the course.) The issues and institutions that relate to humanitarian challenges and humanitarian suffering around the world are often studied separately. However, this course will take a broad and integrated approach, designed to give students a wide understanding of the lay of the humanitarian land and the questions with which policy makers and policy practitioners grapple?including those relating to security, disaster response and human rights, and the roles of international and non-governmental humanitarian organizations. In addition to focusing on the efforts of the international community, the course will examine the role and institutions of the United States government, the largest provider of international humanitarian aid. Learning objectives: Students who successfully complete the course will gain a broad understanding of the policy issues that are involved in international humanitarian response?an understanding that will integrate concepts from a range of fields?as well as knowledge of the key institutions that define and impact policy and practice in this area. Students will also develop an appreciation of the key dilemmas faced by policy-makers and practitioners involved in response to complex crises, the challenges to achieving policy and operational objectives, and the strategies for success.

Style: 25% Lecture, 70% Discussion, 5% Guest Speakers. See syllabus for description of class discussion.

Grading: 40% final exam, 25% reports/papers, 35% class participation. Report is 3-4 page policy brief based exclusively on material provided in syllabus and in class. See syllabus for specifics on class participation and other grading.

Exam Format: Essay.
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: Seashore, Karen Rose
Description: This course, the capstone academic experience in the Undergraduate Leadership Minor sequence, is designed to focus student learning that has been developed in earlier leadership courses. Leadership theory, community building, social change, and interdisciplinary approaches to complex global issues will be the main components in this course. Students will be expected to demonstrate skill in analysis of pertinent literature, write with purpose and clarity, appreciate intense internships, and lead thoughtful group study. In this course, students will finalize portfolios and submit other scholarly products to demonstrate a mature understanding of personal and positional leadership in a changing global context.

PA 4961W Leadership for Global Citizenship
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Asmundson, Aaron R
Description: Student may contact the instructor or department for information.

PA 4971 Directed Study, Leadership Minor
OPT No Aud, 1-4 credit(s), max credits 15, 5 completions 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 5003 Introduction to Financial Analysis and Management
A-F only, 1.5 credit(s);
Instructor: Kiedrowski, P. Jay
Description: This is an introductory course to budgeting and financial analysis in the context of public and nonprofit organizations. The primary learning objective of this course is how to obtain accurate financial information to make sound management decisions through the analysis of financial documents such as budgets and financial statements. The processes of producing such documents will be introduced but are not the focus of this course. Conceptual frameworks and analytical techniques will be emphasized and applied to analyze real-world financial problems. Lectures, discussions, and cases/examples from nonprofit and public sector organizations will be utilized.
Style: 50% Lecture, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Demonstration.
Grading: 30% mid exam, 30% final exam, 25% reports/papers, 15% class participation.

PA 5004 Introduction to Planning
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
PA 5011 Management of Organizations
A-F only, 3 credit(s);
Instructor: Quick,Kathy
Description: This course is designed to provide students a foundation of knowledge about public and nonprofit organizations, to help you think and act from the perspective of a manager considering ways to strengthen the work of organizations. To create that foundation, we focus on organizations and different ways to analyze them. Through active participation, you will become acquainted with the basic concepts, competencies, and skills needed to manage and lead organizations involved in making and carrying out policies and programs to address public issues. The course moves through the various levels of organizational behavior. We begin with your own skills and consider how to use them to work effectively in groups. We then consider the elements of organizations and the character of the larger environment that shapes what happens within them and how they interact with other organizations. Throughout, you will come to see that organizations operate as systems within particular contexts that provide both opportunities and constraints.
Style: 20% Lecture, 5% Film/Video, 30% Discussion, 20% Small Group Activities, 15% Student Presentation, 10% Web Based.
Grading: 55% reports/papers, 20% in-class presentation, 15% class participation, 10% other evaluation. 10% of final grade is peer-to-peer evaluation of performance on team project.

PA 5012 The Politics of Public Affairs
A-F only, 3 credit(s);
Instructor: Jacobs,Larry
Description: Student may contact the instructor or department for information.

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);
Instructor: Coleman,Jean Lynn
Description:Introduction to tools useful for public policy: intermediate microeconomics, macroeconomics, concepts of international trade.

PA 5021 Economics For Policy Analysis and Planning I
A-F only, 3 credit(s);
Instructor: Le,Thanh Trung
Description: Student may contact the instructor or department for information.

PA 5021 Economics For Policy Analysis and Planning I
A-F only, 3 credit(s);
Instructor: Hanratty,Maria J
Description: Introduction to tools useful for public policy: intermediate microeconomics, macroeconomics, concepts of international trade.

PA 5022 Economics For Policy Analysis and Planning II: Econ of Early Childhood Development
A-F only, 3 credit(s), max credits 4.5, 3 completions allowed;
Instructor: Rolnick,Arthur Jeffrey
Description: In this course we examine early childhood development (ECD) from an economic perspective, viewing ECD as economic development. Students will become familiar with the role of government in a market economy with a specific focus on the role of ECD and human capital in general in economic growth and development. Students will learn about the newer research from longitudinal studies of ECD as well as newer studies of early brain development. Students will develop an understanding of the basic features of cost- benefit (or return on investment) analysis as a tool for efficient resource allocation. The second half of the class requires students to become familiar with and to be able to critically evaluate studies of the effectiveness of various ECD policies. Specific programs or policies will be examined with an emphasis on identifying the characteristics of rigorous evaluations. The course ends with a discussion of the local, national

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

PA 5041 Qualitative Methods for Policy Analysts
A-F only, 4 credit(s);
Instructor: Parkinson, Sarah Elizabeth
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: Sandfort, Jodi R.
Description:

PA 5051 Cohort Leadership I
A-F only, 2 credit(s);
Instructor: Gerdes, Kevin Scott
Description:

PA 5053 Cohort Policy Analysis I
A-F only, 2 credit(s);
Instructor: Sandfort, Jodi R.
Description: Student may contact the instructor or department for information.

PA 5055 Cohort Analytics for Leaders I
A-F only, 2 credit(s);
Instructor: Fertig, Angie
Description: Student may contact the instructor or department for information.

PA 5080 Capstone Preparation Workshop
PA 5081 Working in Teams: Crossing Disciplines and Learning from Difference
S-N only, 0.5 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 PA5180 Working in Teams: Crossing Disciplines and Learning from Difference 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 5102 Organization Performance and Change
3 credit(s);
Instructor: Cunningham, Gary Leonard
Description: Student may contact the instructor or department for information.

PA 5103 Leadership and Change in an Innovation Society
3 credit(s);
Instructor: Crosby, Barbara C
Description: Change is often built into definitions of leadership, and certainly many scholars and practitioners have written about how leaders can foster change in their organizations or communities. Moreover, understanding the links between leadership and change takes on increased urgency as the United States and other countries strive to foster an innovation economy and navigate through complex, turbulent political terrain. Leaders will need conceptual tools and practical skills to promote innovative organizations that thrive and contribute to an innovative society. Accordingly, this seminar will examine models of change and models of leadership and investigate how leaders can promote desirable personal, organizational and societal change. Case studies and action research will be emphasized. An important class product will be a framework for leadership and change in an innovation society. During each class session, one or two learners will be responsible for recording takeways from the evening's conversation. When participants complete this course, they will have knowledge, skills, wisdom, and motivation that enable them to practice personal, team, organizational and societal leadership aimed at innovation for the common good.
Grading: 35% reports/papers, 25% reflection paper, 30% class participation, 10% other evaluation.

PA 5104 Strategic Human Resource Management
A-F only, 3 credit(s);
Instructor: Kiedrowski, P. Jay
Description: Theory/practice of developing, utilizing, and aligning human resources to improve culture/outcomes of nonprofit/public organizations. HR strategy, individual diversity, leadership, selection, training, compensation, classification, performance appraisal, future HR practices.
Style: 40% Lecture, 30% Discussion, 20% Student Presentation, 10% Guest Speakers.
Grading: 45% reports/papers, 30% in-class presentation, 25% class participation.

PA 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: Quast, Louis Neumann
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 coproducing an understanding of what integrative leadership is. Requirements: - that the student be in the MBA or EMBA program OR - that the student be a master's student in the Humphrey who has taken PA 5011 or PA 5941 or obtains instr consent [this rule is in place for registration for the PA section of the course, PA 5105] OR - that the student obtain the instructor's consent

Style: 15% Lecture, 20% Discussion, 25% Small Group Activities, 10% Student Presentation, 15% Guest Speakers, 15% Web Based.

Grading: 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 Board leadership development
S-N only, 1.5 credit(s);
Instructor: Stone,Melissa M
Description:

PA 5180 Topics in Executive Leadership: Public Safety Ldrship I
OPT No Aud, 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 Kelliher,Margaret E
Description: This highly interactive prepares students for professional negotiation in a variety of arenas. The development of conflict resolution skills will help students as they navigate through diverse audiences and a world that is increasing in its complexity every day. This portfolio of conflict solving skills is a must for every student of public policy and affairs and those who will be interacting with the public sector in a professional role. The course will introduce students to the theory and practice of negotiation and provide opportunities to test out skills and learn from experts. In-class sessions will include a number of structured exercises in which students will negotiate issues ranging from professional compensation, union conflicts, and international development.

Style: Lecture, Discussion, and Negotiation Exercises. Possible guest speakers.
Grading: 35% reports/papers, 30% class participation. 35% is for reflections and on-line posts.

PA 5211 Land Use Planning
A-F only, 3 credit(s);
Instructor: Fan,Yingling
Description: To land use planners, the perennial question is how land use planning can be applied to create human settlement patterns that promote sustainable, equitable, and livable outcomes in metropolitan regions, cities, towns, and villages. Answers to this question are explored in this course with a focus on real-world planning process and implementation. Students will be exposed to a variety of methods and techniques available to planning practitioners to create and implement high-quality land use plans. Skills covered in this course include analysis and synthesis skills; oral, graphic, and written communication skills; and skills for working effectively as a member of a planning team and with community stakeholders. By the end of this course, students should be able to articulate a clear vision of what constitute an effective local land use plan and be able to describe a range of possible plan formats. Students should be able to specify the components of a complete land use planning program, and know where a plan fits into such a program. Students should have developed a dependable sense of judgment for assessing the validity, effectiveness, feasibility, strengths and weaknesses of various land use plan-making methods and plan formats. More specifically, this course will help students learn how to formulate a land use plan in a professional manner and appropriate to the community context by actually making a plan for a small-size hypothetical city. Tasks to be mastered in this course include: 1. Describe and assess
existing and emerging community conditions; 2. Formulate goals and objective towards a community vision statement; 3. Translate projections of economic and population changes into their land use implications for land, location, and community services; 4. Determine the suitability of land and locations for various land uses; 5. Apply computer technology to specific plan-making tasks such as map presentations, land suitability analyses, and the drawing of plans; 6. Design a future urban form that meets the community’s objectives, accommodates the future population and economy, and incorporates community aspirations for a quality of life; and 7. Outline a development management program that helps bring such a future.

PA 5231 Transit Planning and Management
3 credit(s);
Instructor: Grams, Lyssa Leitner
Description: Student may contact the instructor or department for information.

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 5271 Geographic Information Systems: Applications in Planning and Policy Analysis
3 credit(s);
Instructor: Maas, Geoffrey Michael
Description: Student may contact the instructor or department for information.

PA 5281 Immigrants, Urban Planning and Policymaking in the U.S.
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: Acara global venture design: Grand challenges**
- 4 credit(s), max credits 12, 3 completions allowed;
- **Instructor:** Nord, Tobin Lawrence
- **Description:** Social-environmental venture solution design course to address global grand challenges

**PA 5290 Topics in Planning: Acara global venture design: Grand challenges**
- 4 credit(s), max credits 12, 3 completions allowed;
- **Instructor:** Marshall, Julian
- **Description:** Social-environmental venture solution design course to address global grand challenges

**PA 5290 Topics in Planning: Mayor 101: Great Minnesota Places**
- 3 credit(s), max credits 12, 3 completions allowed;
- **Instructor:** Rybak, RT
- **Description:** This course will place students at the intersection of politics, economics and design as they examine real life, real time attempts to create Minnesota’s next great places. Former Minneapolis Mayor R.T. Rybak will lead students through an examination of the key challenges facing attempts to redevelop Minneapolis’ West Bank and Nicollet-Lake district (including the current K-Mart site and 29th St.), Rochester’s Destination Medical Center, Duluth’s St. Louis River redevelopment and a site to be named in St. Paul. Students will explore aesthetic, economic and political factors impacting these projects, and engage in hands-on, on-site attempts to impact these projects. Two optional site visits will also be part of the course. We will be going to Duluth on September 19th and Rochester on November 7th. Lectures are divided into the following sections: ? Duluth St. Louis River Corridor Development ? Great City Principles ? Downtown East ? Rochester Destination Medical Center ? Minneapolis Kmart and 29th Street Site ? Downtown St. Paul ? Samatar Crossing
- **Style:** 40% Lecture, 20% Discussion, 10% Small Group Activities, 10% Student Presentation, 10% Field Trips, 10% Guest Speakers.
- **Grading:** 55% reports/papers, 40% special projects, 5% class participation. Attendance and participation 5%

**PA 5301 Population Methods & Issues for the United States & Global South**
- 3 credit(s); Grad student or instr consent
- Credit will not be granted if credit has been received for: SOC 5511;
- **Instructor:** Drew, Julia Ana-Rivera
- **Description:** Student may contact the instructor or department for information.

**PA 5311 Program Evaluation**
- 3 credit(s);
- **Instructor:** Cakici, Hanife
- **Description:** Student may contact the instructor or department for information.

**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 5405 Public Policy Implementation**
- A-F only, 3 credit(s);
- **Instructor:** Sandfort, Jodi R.
- **Description:** This course examines issues in the implementation of public programs and policies. It explores implementation as an integral, dynamic and often unpredictable component of the policy-making process. Policies are not only created by elected officials, who authorize and fund government activities, but also by state administrators, local managers, front-line staff, and policy clients. Because these actors create the operating procedures, establish the goals, distribute the scarce resources, and react to new policy initiatives, sometimes in contradictory ways, implementation is not a straight-forward, linear process. Much of policy implementation involves negotiation between different levels of government and/or nonprofits in decentralized service delivery systems. This course provides students skills to better understand and navigate these dynamics. Because implementation is inherently a social process, it requires skillful actors who can both analyze situations and work effectively with others to direct resources, manage competing demands, and move toward positive social outcomes. As such, students need to cultivate their abilities to be analytical, reflective and adaptive.
PA 5442 Policy Design for Education and Human Development
3 credit(s);
Instructor: Kelley, Steve
Description: LAW 6159/PA 5442 Policy Design for Education and Human Development In recognition of the combined importance of law and policy in the design of the American system of K-12 education and human development, this course explores the legal, fiscal, and political essentials of education policy design, including the roles of state constitutions, the federal government, governors, legislatures, courts, advocacy organizations, parents, teachers and students. To help identify the notable elements of the design of the American system, the course will draw on materials providing international comparisons. Society’s expectations for education and human development have been and are constantly changing. Consequently, the course deals with the process of education law and policy change, including school integration, the inclusion of students with disabilities, educational standards, testing, and current calls for education reform. We will also consider the role of policy analysis and new discoveries in neuroscience and psychology in guiding improvements in human development policy design. Course readings will include judicial decisions, statutes, policy analyses, and journalistic accounts of education and human development law and policy. Classes will consist of active student discussion of legal and policy design issues, presentations by guest speakers who are active practitioners in education law and policy and presentation of group research projects.

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 and 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.

3 credit(s), max credits 9, 3 completions allowed;
Instructor: Mayes, Keith A
Description: Student may contact the instructor or department for information.

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);
PA 5522 International Development Policy, Families, and Health

3 credit(s);
Instructor: Gilbert, Lewis E.

Description: Whether in an Andean town or a city in the United States, family members negotiate how to spend money and time; who should be employed for pay; who should care for the young, the elderly and the ill; and even how much physical abuse one individual can inflict on another. Surprisingly, until recently it was assumed that households functioned as single decision-making units and that providing resources to heads of households, usually assumed to be men, would improve the well-being of all members of the household. It is now known that households do not behave as cohesive units; bargaining over the allocation of resources is intensely conditioned by gender-based power differentials. In order to guide development policy, scholars strive to understand what augments or diminishes bargaining power. Property ownership, wage income, paid and unpaid work, individual health, and social capital among other elements are all interrelated in a complex web, and all have implications for an individual’s bargaining power within the household. In addition, all of these factors are heavily influenced by gendered cultural norms and expectations. Through readings, lectures and discussions, this course will invite students to explore the implications of paid and unpaid labor for development policy using household economics and family health as a prism. After studying various theoretical frameworks of household economics and family health, a range of topics will be explored including property ownership, the legal and cultural use of property rights, the financial effects of ill health, and the feedback loop that financial strain places on health, as well as work-family conflict and policies that alleviate such conflict. The role of gender and an overview of qualitative methods used in this field will be incorporated throughout the course.

Grading: 35% reports/papers, 10% reflection paper, 15% in-class presentation, 30% class participation, 10% other evaluation. Other Evaluation: Teamwork -team member assessments 10% Class Participation (30%) includes case study participation, a cluster study critique and team case study presentation in class. See syllabus for more details.

Exam Format: No exam
PA 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

Description: This interdisciplinary course will examine issues at the nexus of law, ethics, public policy, and emerging sciences and technologies (ES&T) including nanotechnology, genetic and biomedical engineering, cognitive science, synthetic biology, and robotics. Topics we will explore include the role of science and technology as both a tool for and the subject of law and policy; the legal, ethical, economic, and policy implications of ES&T research and development; environmental and human health risk analysis and regulation (e.g., EPA, FDA, OSHA, and state and local regulatory mechanisms); intellectual property issues; liability issues; and global impacts. Topics will be approached from the perspective of different stakeholders (e.g., federal agencies, industry, academic researchers, the environment, international organizations, and the public) and in the context of different application areas (e.g., drugs, devices, food, agriculture, energy, environmental remediation) using a variety of interdisciplinary approaches. Students with a broad range of interests are encouraged to enroll.

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 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 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
Description: 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: International Humanitarian Crisis Simulation
1 credit(s), max credits 9, 3 completions allowed;
Instructor: Gray, Sherry
Description: This course will allow students to participate in an intensive experiential educational component co-taught with the Center for Global Health in the Department of Medicine, University of Minnesota Medical School, and with assistance from the University of Minnesota School of Public Health, School of Architecture, and College of Veterinary Medicine; Hennepin County Medical Center, Mayo Clinic, Minnesota National Guard, the University of Iowa; Case Western Reserve; New American Alliance for Development; and the Minnesota International NGO Network (MINN). For more information about this project: http://www.globalhealth.umn.edu/education/humanitarian-simulation/#sthash.zr4U5SUa.dpuf Course will include a pre-simulation in class meeting in late August or first week of September (dates/times to be determined in mid-August), a 48-hour crisis simulation, a post-simulation class meeting (within two weeks of the simulation), and a final reflection paper.
Style: 10% Lecture, 90% Demonstration. Required class meeting time is 8am Friday September 5 to 1pm Sunday September 7
Grading: 80% class participation, 15% problem solving, 5% other evaluation. Grading is based upon team and instructor evaluations and quality of final paper. Attendance is required (so 100% of all activities).
Exam Format: No exam.

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: Visual Strategy Mapping
1 credit(s), max credits 12, 12 completions allowed;
Instructor: Bryson, John M
Description:

PA 5920 Skills Workshop: HPAR Editorial Board
1.5 credit(s), max credits 12, 12 completions allowed;
Instructor: Myers Jr, Samuel L
Description: Student may contact the instructor or department for information.

PA 5920 Skills Workshop: Public Communication
1 credit(s), max credits 12, 12 completions allowed;
Instructor: Levison, Deborah
Description: Participants will learn techniques for making effective, persuasive presentations to different kinds of audiences. They will record themselves doing some kind of presentation every week; sometimes they will also give this presentation in class. This practice is essential to overcome anxiety about public speaking. There will be no tests. Students will be graded on dimensions of presentations, completion of readings/videos, reflections and peer reviews, and class participation. Attendance at each class is required.
Style: 10% Lecture, 40% Discussion, 50% Student Presentation.
Grading: 15% reflection paper, 50% in-class presentation, 10% class participation, 25% other evaluation. 25% - feedback to other students

PA 5920 Skills Workshop: Public Communication
2 credit(s), max credits 12, 12 completions allowed;
Instructor: Levison, Deborah
Description: Participants will learn techniques for making effective, persuasive presentations to different kinds of audiences. They will record themselves doing some kind of presentation every week; sometimes they will also give this presentation in class. This practice is essential to overcome anxiety about public speaking. There will be no tests. Students will be graded on dimensions of presentations, completion of readings/videos, reflections and peer reviews, and class participation. Attendance at each class is required.

PA 5920 Skills Workshop: Data Visualization: Telling Stories with Numbers
1.5 credit(s), max credits 12, 12 completions allowed;
Instructor: Dorelien, Audrey Marie-Christine
Description: Student may contact the instructor or department for information.

PA 5980 Topics in American Election Administration: 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: The Art and Science of Political Campaigns
3 credit(s), max credits 9, 6 completions allowed;
Instructor: McClung, Brian John
Description: In the United States today, it almost feels as if we are in the midst of a permanent political campaign. From
the moment one campaign ends, elected officials, the media, and outside interest groups are almost immediately operating within the context of the next election. To that end, what happens within political campaigns has a profound impact on shaping what comes after them. In this course, students will develop an understanding of campaigns and elections, and their impact on elected leaders and public policy development against the backdrop of the 2014 U.S. Senate and gubernatorial elections. The course is intended to help you understand how candidates and campaign staff make leadership decisions that affect the outcomes of elections, and simultaneously manage what are, in effect, large, complex, and short-term public businesses with ever increasing budgets. The course will roughly parallel the actual arc of traditional political campaigns, from looking at questions of why candidates run and how they assemble their campaigns, to understanding the importance of data and integrating fundraising, advertising, and grassroots organizing, to exploring the ultimate transition from campaigning to governing. The course is also designed to not just introduce core concepts around political strategy and messaging, but also to allow students the opportunity to experience and practice some of the tactical elements of political campaigns—the execution of which shape candidates and their campaign staff. Students will develop an understanding of campaigns & elections, and their impact on elected leaders and public policy, set against the backdrop of the 2014 U.S. Senate and gubernatorial elections. Instructors have decades of hands-on experience. Dan Cramer is co-founder of Minnesota's leading grassroots outreach firm and was a top aide to U.S. Senator Paul Wellstone and Minnesota Speaker of the House Phil Carruthers. Brian McClung works in media and public relations and was Governor Tim Pawlenty's spokesman and Deputy Chief of Staff. If questions, they may be reached by e-mail at brian@mcclungpr.com and dan@grassrootsolutions.com.

PA 5990 Topics: Public Affairs--General Topics: Global Public Policy: Int'l development policy
0 credit(s), max credits 9, 6 completions allowed;
Instructor: Wilsey PhD, David Scott
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, capstone 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 5990 Topics: Public Affairs--General Topics: The Art and Science of Political Campaigns
3 credit(s), max credits 9, 6 completions allowed;
Instructor: Cramer, Daniel Maurice
Description: In the United States today, it almost feels as if we are in the midst of a permanent political campaign. From the moment one campaign ends, elected officials, the media, and outside interest groups are almost immediately operating within the context of the next election. To that end, what happens within political campaigns has a profound impact on shaping what comes after them. In this course, students will develop an understanding of campaigns and elections, and their impact on elected leaders and public policy development against the backdrop of the 2014 U.S. Senate and gubernatorial elections. The course is intended to help you understand how candidates and campaign staff make leadership decisions that affect the outcomes of elections, and simultaneously manage what are, in effect, large, complex, and short-term public businesses with ever increasing budgets. The course will roughly parallel the actual arc of traditional political campaigns, from looking at questions of why candidates run and how they assemble their campaigns, to understanding the importance of data and integrating fundraising, advertising, and grassroots organizing, to exploring the ultimate transition from campaigning to governing. The course is also designed to not just introduce core concepts around
political strategy and messaging, but also to allow students the opportunity to experience and practice some of the tactical elements of political campaigns—the execution of which shape candidates and their campaign staff. Students will develop an understanding of campaigns & elections, and their impact on elected leaders and public policy, set against the backdrop of the 2014 U.S. Senate and gubernatorial elections. Instructors have decades of hands-on experience. Dan Cramer is co-founder of Minnesota's leading grassroots outreach firm and was a top aide to U.S. Senator Paul Wellstone and Minnesota Speaker of the House Phil Carruthers. Brian McClung works in media and public relations and was Governor Tim Pawlenty's spokesman and Deputy Chief of Staff. If questions, they may be reached by e-mail at brian@mcclungpr.com and dan@grassrootssolutions.com.

PA 8003 Integrative Doctoral Seminar in Public Affairs I
A-F only, 3 credit(s), max credits 6, 1 completion allowed;
Instructor: Quick,Kathy
Description:

PA 8004 Integrative Doctoral Seminar in Public Affairs II
A-F only, 3 credit(s);
Instructor: Goetz,Edward Glenn
Description: Student may contact the instructor or department for information.

PA 8081 Capstone Workshop: Occ Reg & Geographic Movement of Workers
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: Kelley,Steve
Description: Student may contact the instructor or department for information.

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 8290 Advanced Topics in Planning: Advanced Transportation Technologies Seminar
1 credit(s), max credits 6;
Instructor: Donath,Max
Description:

PA 8302 Applied Policy Analysis
OPT No Aud, 4 credit(s);
Instructor: Johnson, Janna Elizabeth  
Description: Student may contact the instructor or department for information.

PA 8312 Analysis of Discrimination  
4 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 8390 Advanced Topics in Advanced Policy Analysis Methods: Global & U.S. Perspectives on Health & Mortality  
3 credit(s), max credits 6;  
Instructor: Dorelien, Audrey Marie-Christine  
Description: The health of populations in developing and developed countries is very different. Within countries, great health disparities exist between more advantaged and more disadvantaged populations. When crafting policies that aim to improve population health, it is crucial to know how to measure health and how to think about the health needs of the specific population in question. This course will provide an overview to the factors driving health, mortality, and aging across different populations. In addition, students will learn the best sources of data and measures to use to describe the health status of a population. Furthermore, students will be able to assess policy options that address the health of their population. Please contact the instructor, Audrey Dorelien, at dorelien@umich.edu if you have questions. This course fulfills concentration requirements in Social Policy, Advanced Policy Analysis, Global Policy, and the university wide graduate minor in population studies.

PA 8690 Advanced Topics in Women and Public Policy: Body as Text & Context in Law, Pub Pol & Medicine  
3 credit(s), max credits 6;  
Instructor: Schuster, Mary Lay  
Description: This seminar explores how the body is configured in legal decisions, public policy debates, and funding and acceptance of medical research and treatment. In particular, we will look at how attitudes toward male and female bodies influence social myths and criminal categorization of domestic violence; how reproductive technologies symbolically divide or unite the maternal body and the fetal body; and how the body and parts of the body become symbols or texts for public and professional discussions of medical research and procedures. The course begins with foundational reading and discussion from the interdisciplinary work on how bodies are defined and marked, from HIV/AIDS tattoos to proposed mandatory HPV vaccination to human rights abuses in maquiladoras to definitions of disability and finally to social movements such as animal rights and environmental ethics. One part of the seminar deals with aspects of domestic violence, including the roles of prosecutors, judges, and the court system in dealing with the problem; the part of emotion and gender myths in criminal law; the recent controversies about sex offender legislation; and the language and principles articulated in historical and current court cases. Another part of the seminar deals with controversies in reproduction, from surrogates to breastfeeding to infertility treatment to homebirth and finally to unplanned pregnancies as portrayed in current films, such as Juno and Knocked Up. The final aspect of the seminar focuses on body debate in medical research and procedures, such as stem cell research, genetic counseling, chemical exposure in fetuses, and historical and current eugenics. Graduate students from all disciplinary areas are welcome. Students will have an opportunity to work on a project of interest. For more information, contact Professor Mary Schuster, mmlay@umn.edu.

PA 8821 National Security Policy  
3 credit(s);  
Instructor: Andreassen, Steven Peter  
Description:

PA 8890 Advanced Topics in Foreign Policy and International Affairs: Managing Global Crises  
3 credit(s), max credits 6;  
Instructor: Schwartz, Eric Paul  
Description: Managing Global Crises: Human Rights and Humanitarian Challenges for Policy Makers and Practitioners
Mondays, 6 pm to 8:45 pm, Blegen 215 Humphrey School Dean Eric Schwartz will be teaching this course. Dean Schwartz served in the White House and the State Department in the Clinton and Obama Administrations, as well as the United Nations and with Human Rights Watch. From Syria and Iraq to Somalia and Sudan, man-made disasters, which principally impact populations in the developing world, pose compelling challenges to the capacities of governments and international organizations to prevent and alleviate suffering and promote recovery. Moreover, especially after 9/11, the complex crises that result in humanitarian suffering became the focus of serious concern among policy-makers and practitioners in the United States, who began to view effective responses as important in avoiding political instability and state failure. This course, which will involve lecture and class discussion, will examine the efforts of the international community—governments, international organizations, non-governmental organizations (NGOs) and others—to respond to humanitarian, recovery and reconstruction challenges posed by man-made disasters that impact civilians. (We will also consider disasters related to natural hazards, like storm surges and hurricanes, though those will not be a major focus of the course.) The issues and institutions that relate to humanitarian challenges and humanitarian suffering around the world are often studied separately. However, this course will take a broad and integrated approach, designed to give students a wide understanding of the lay of the humanitarian land and the questions with which policy makers and policy practitioners grapple— including those relating to security, disaster response and human rights, and the roles of international and non-governmental humanitarian organizations. In addition to focusing on the efforts of the international community, the course will examine the role and institutions of the United States government, the largest provider of international humanitarian aid. Learning objectives: Students who successfully complete the course will gain a broad understanding of the policy issues that are involved in international humanitarian response—an understanding that will integrate concepts from a range of fields—as well as knowledge of the key institutions that define and impact policy and practice in this area. Students will also develop an appreciation of the key dilemmas faced by policy-makers and practitioners involved in response to complex crises, the challenges to achieving policy and operational objectives, and the strategies for success.

Style: 25% Lecture, 70% Discussion, 5% Guest Speakers. See syllabus for description of class discussion.
Grading: 35% final exam, 40% reports/papers, 25% class participation. One report is 3-4 page policy brief based exclusively on material provided in syllabus and in class. Second report is 10 page policy paper. See syllabus for specifics on class participation and other grading.

Exam Format: Essay.

PA 8921 Master’s: Professional Paper (Individual Option)
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Stone, Melissa 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: Atwood, John Brian
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: Swackhamer, Deborah L
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: 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: 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: 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: 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: 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: 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: Kelley, Steve
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. SOS is intended for undergraduate students of any major who want to learn how to better manage their stress, and/or want experience taking an online course. It is entirely web-based. Students must have access to a computer and the Internet and should have basic computing skills. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/index.html. Students should contact SOSTress@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts. SOS is offered through the Rothenberger Institute. RI provides a suite of wellness-based courses focusing on the knowledge and skills students need to lead healthy, productive, and balanced lives. For more information about the course, visit http://www.ri.umn.edu. 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. ACL is intended for first-year college students; sophomores and PSEO students may also enroll. It is entirely web-based. Students must have reliable access to a computer and the Internet and
should have basic computing skills. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/index.html. Students should contact ACLife@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts. ACL is offered through the Rothenberger Institute. RI provides a suite of wellness-based courses focusing on the knowledge and skills students need to lead healthy, productive, and balanced lives. For more information, visit www.ri.umn.edu.

**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.

**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.

SM is intended for undergraduate students of any major who want to learn how to better understand their sexuality, and/or want experience taking an online course. It is entirely web-based. Students must have access to a computer and the Internet and should have basic computing skills. To self-assess your readiness for e-learning, go to: http://digitalcampus.umn.edu/apply/online-student-resources.html. Students should email SMatters@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts.

**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.

**Grading:** 37% quizzes, 63% written homework.

**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.

SEE is intended for undergraduate students who want a basic knowledge of one or more of the main topic areas, want help achieving/maintaining a healthy lifestyle, and/or want experience taking an online course. It is entirely web-based. Students must have access to a computer and the Internet and should have basic computing skills. To self-assess your readiness for e-learning and learn tips for successful e-learning, go to: http://digitalcampus.umn.edu/resources/index.html. Students should email SEE@umn.edu with any questions or concerns. Emails should be sent from U of M email accounts.

**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.

**Grading:** 40% quizzes, 60% written homework.

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

PubH 3005 Fundamentals of Alcohol and Drug Abuse for Teacher Education  
1 credit(s); Undergrad in agricultural educ or business/marketing educ or career/technical educ or foundations of educ or [kinesiology, pre-PE] or technology educ or music educ Credit will not be granted if credit has been received for: PUBH 3003;  
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/apply/online-student-resources.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: 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. Style: Online  
Grading: See attached syllabus

PubH 3050 Practicum in Peer Education I  
A-F only, 2 credit(s);  
Instructor: Sanem, Julie 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 3106 Making Sense of Health Studies
2 credit(s); Credit will not be granted if credit has been received for PUBH 6106;
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.<br>Additional, 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.<br>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.<br>This course satisfies a core-course requirement for the Public Health minor.<br>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: Stenberg, Louise Carol
Description: Student may contact the instructor or department for information.

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 3531 Health Policy in a Global Context
A-F only, 3 credit(s); Meets CLE req of Global Perspectives; meets CLE req of Social Sciences
Instructor: Sage PhD, Starr Kelly
Description: Student may contact the instructor or department for information.

PubH 3561 Environmental Health and Environmental Justice
A-F only, 3 credit(s); Meets CLE req of Environment; meets CLE req of Social Sciences
Instructor: Sage PhD, Starr Kelly
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
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 5231 Emergency Preparedness: A Public Health Perspective
A-F only, 2 credit(s);
Instructor: Kircher, Amy
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. 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/apply/online-student-resources.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
3 credit(s); A-F only, 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);
Instructor: Hennrikus, Deborah Jane
Description: The purpose of this course is to teach basic research skills and concepts needed to plan, conduct, and analyze data from a research project. Skills including performing literature searches; questionnaire development; scale construction; item analysis; data coding, entry and analysis; and report writing will be taught. Through the semester, students will develop a research question, devise and implement a brief survey to address that question, analyze their survey data using STATA statistical software, and write a report. Most of the class and lab activities will focus on the steps involved in completing this project. Students will also be given a chance to develop their STATA data management and analysis skills using existing datasets.
Style: 50% Lecture, 5% Discussion, 25% Laboratory, 15% Small Group Activities, 5% Student Presentation.
Grading: 40% reports/papers, 48% written homework, 5% in-class presentation, 7% class participation.

PubH 6050 Community Health Theory and Practice I
3 credit(s);
Instructor: 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. (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); [One course in [behavioral or social science], [public health or journalism] grad student] or instr consent Credit will not be granted if credit has been received for: JOUR 5541;
Instructor: Yzer, Marco
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. For SPH and Health Sciences students, this course is intended to complement courses in social and behavioral approaches to community health. This
includes the intervention core in Community Health Education and the social and behavioral science perspectives in MPH programs in general. This course is primarily a critical review of theory, research, and applications of mass media in public health but applies to planning principles for developing media-based public health interventions. For students in Journalism and Mass Communication, the course is intended to complement social and behavioral science approaches to public opinion and media effects as well as to provide another perspective on the study of mass media as social institutions. For students in Health Communication, the course also is intended as a basis for courses on health message design and public health campaign evaluation. The learning objectives of this 3-credit course are to advance the student’s familiarity, comprehension, and application of a broad range of mass communication-related facts, concepts, and theories as they apply to public health: 1. The student will recognize the transdisciplinary nature of mass communication and public health, and will identify the critical relationships between theoretical ideas from different disciplines, i.e., communication, public health and psychology. 2. The student will identify the complex interdependence of critical factors in mass communication of public health, i.e., factors related to audience, environment (e.g., competing and reinforcing media efforts), message, and the health issue at hand. 3. The student will be able to analyze the effects of various media content on the public’s beliefs about health issues. 4. The student will be able to write about health communication issues in a compelling manner. This means that the student’s writing carefully builds an argument that integrates theoretical notions about communication and health, and applies them to real life issues. 5. Self-discovery: The student will reflect on herself or himself as a scholar, a producer of media health information, and a consumer of media health messages. How do the approaches discussed in this course relate to your individual interests? What are the implications of the planned and unplanned effects of health media information for how you engage with the media?

PubH 6078 Public Health Policy as a Prevention Strategy
2 credit(s);
Instructor: Toomey, Traci Louise
Description: Student may contact the instructor or department for information.

PubH 6100 Topics: Environmental Health: Complex Systems Modeling for Population Health
2 credit(s), max credits 20, 20 completions allowed;
Instructor: Convertino PhD, Matteo
Description: Student may contact the instructor or department for information.

PubH 6101 Environmental Health
A-F only, 2 credit(s);
Instructor: Simcik, Matt
Description: Student may contact the instructor or department for information.

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 6106 Making Sense of Health Studies
OPT No Aud, 2 credit(s); Credit will not be granted if credit has been received for: PUBH 3106;
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. I. 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. 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: Hamilton, Karin Elizabeth
Description: Student may contact the instructor or department for information.

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 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 6162 Biomarkers
A-F only, 2 credit(s);
Instructor: Stepanov, Irina
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 6200 Topics: Foundations of Interprofessional Communication and Collaboration
S-N only, 1 credit(s), max credits 80, 20 completions allowed;
Instructor: Miles, Aida
Description: Student may contact the instructor or department for information.

PubH 6301 Fundamentals of Clinical Research
3 credit(s); Clinical Research major or instr consent Credit will not be granted if credit has been received for: PUBH 6305;
Instructor: Lakshminarayan, Kamakshi
Description: This course is intended to provide a foundation for the more advanced study that is necessary to become an accomplished clinical research investigator. This course will review the concepts that underlie successful clinical research design, implementation, and reporting. This course will also expose students to the resources and opportunities available to support clinical research at the academic health center.
Style: 30% Lecture, 30% Discussion, 40% Guest Speakers.
Grading: 20% mid exam, 30% final exam, 50% written homework.

PubH 6320 Fundamentals of Epidemiology
A-F only, 3 credit(s);
Instructor: Punyko, Judy
Description: Student may contact the instructor or department for information.

PubH 6320 Fundamentals of Epidemiology
A-F only, 3 credit(s);
Instructor: Widome, Rachel L
Description: Student may contact the instructor or department for information.

PubH 6325 Data Processing with PC-SAS
1 credit(s);
Instructor: Oakes, Michael
Description: The aim of this course is to introduce School of Public Health (SPH) students to methods for processing existing data sources in SAS. This time-intensive short course emphasizes hands-on and otherwise practical approaches to prestatistical data processing and analysis with PC-SAS statistical software on an PC with a MS Windows operating system. The course is basic and introductory. The intended audience is public health masters and doctoral students but others are welcome.

PubH 6333 Principles of Human Behavior I
A-F only, 2 credit(s);
Instructor: Nelson, Toben F
Description: Student may contact the instructor or department for information.

PubH 6341 Epidemiologic Methods I
A-F only, 3 credit(s), max credits 6;
Instructor: Lutsey, Pamela Lynne
Description: Student may contact the instructor or department for information.

PubH 6341 Epidemiologic Methods I
A-F only, 3 credit(s), max credits 6;
Instructor: Kulasingam, Shalini L
Description: Description: Epidemiologic Methods I is a combination of a subject matter science and research
methodology. Epidemiologic Methods I focuses on the latter component. The course introduces the study designs applied to human populations, including randomized trials and four types of observational studies (cohort, case-control, cross-sectional, ecological). Because cause-and-effect relations are at the heart of epidemiologic research, numerous related topics are taught in Epidemiologic Methods I including causal inference, bias, and effect modification.

**Style:** 70% Lecture, 20% Discussion, 10% Small Group Activities.

**Grading:** 48% mid exam, 28% final exam, 24% written homework. 8 homework assignments (3 pts ea) Exam 1 (24%): First 1/3 the course Exam 2 (24%): Cumulative with emphasis on material covered in middle 1/3 Exam 3 (28%): Cumulative with emphasis on material covered in final 1

**PubH 6343 Epidemiologic Methods III**
4 credit(s);
**Instructor:** Schreiner,Pamela Jean
**Description:** Epidemiologic Methods III provides instruction in the analysis and interpretation of data from various epidemiological study designs. SAS is used to demonstrate epidemiological and statistical concepts in data analysis. The course is required for all M.P.H. students in Epidemiology. Prerequisites include PubH 6342 (Epidemiologic Methods II) and PubH 6452 (Biostatistics II). Permission of the instructor is needed for substitutions or exemptions. Upon completion of this course, students will be able to: 1) Describe the research hypotheses that are appropriate for cross-sectional studies, case-control studies, and cohort studies; 2) Describe the rationale underlying the major techniques used to analyze data from epidemiological studies; 3) Know how to interpret data from various analyses of epidemiological data; 4) Explain how interactions, confounders and dose-response relations among variables are examined; and 5) Understand basic SAS procedures to analyze data from epidemiological studies. Note that there is no programming required for this course. A companion SAS laboratory course is required for MPH students majoring in Epidemiology, where the focus is hands-on data analysis. For PubH 6343, interpretation of the statistics shown on data printouts is emphasized.

**Style:** 100% Lecture.

**Grading:** 50% mid exam, 30% final exam, 20% written homework. Exams are similar in content and structure to homework assignments and in-class exercises.

**Exam Format:** In-class exams with formulae provided.

**PubH 6348 Writing Research Grants**
A-F only, 2 credit(s);
**Instructor:** Pereira PhD,Mark A
**Description:** Student may contact the instructor or department for information.

**PubH 6348 Writing Research Grants**
A-F only, 2 credit(s);
**Instructor:** Luepker MD,Russell V
**Description:** This course provides instruction and hands-on experience in the preparation of a NIH grant application. This course is required for all PhD students in Epidemiology as preparation for the written preliminary exam. It is also required for the Clinical Research MS Program.

**Style:** 60% Lecture, 5% Film/Video, 10% Discussion, 15% Student Presentation, 10% Guest Speakers.

**Grading:** 40% reports/papers, 25% written homework, 25% in-class presentation, 10% class participation. No Exams

**PubH 6350 Epidemiologic Methods III: Lab**
1 credit(s);
**Instructor:** Pankow,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:** Tang,Weihong
**Description:** Student may contact the instructor or department for information.

**PubH 6365 Epidemiology of Global Health**
2 credit(s);
**Instructor:** Lifson,Alan Raymond
**Description:** Student may contact the instructor or department for information.
PubH 6381 Genetics in Public Health
2 credit(s);
Instructor: Demerath, Ellen Wrchota
Description: This course will provide an introduction to public health genetics. Topics will include an overview of human genetic and genomic variation, genetic epidemiology (study designs and methods used in gene discovery and gene characterization), gene-environment interaction, epigenetics, genetic testing in public health, and the ethical, social, and legal implications of genetic testing and genomic research. Diseases of primary focus will include cancers, obesity, diabetes, and cardiovascular disease, but will also include coverage of other diseases of interest to the class. A collaborative learning environment is encouraged, in which the students as well as the instructor actively contribute their experience and knowledge to the class.
Style: 50% Lecture, 10% Discussion, 20% Student Presentation, 20% Guest Speakers.
Grading: 25% mid exam, 25% reports/papers, 5% quizzes, 10% attendance, 25% in-class presentation, 10% class participation.

PubH 6386 Public Health Aspects of Cardiovascular Disease
2 credit(s);
Instructor: Folsom, Aaron R
Description: This course covers the epidemiology and prevention of cardiovascular disease (CVD). Focus is on epidemiological methods related to CVD, established and novel risk factors, national data sources, approaches to and national recommendations for CVD prevention. Controversies in CVD epidemiology and prevention are covered. The course is designed for epidemiology majors and those in related health fields. Basic epidemiology and statistics courses are pre-requisites. Learning objectives are 1) to understand the descriptive epidemiology of CVD and CVD risk factors, (2) to be able to interpret CVD epidemiologic data, (3) to become familiar with methods used in this field, and (4) to understand individual and population approaches to CVD prevention.
Style: 75% Lecture, 15% Discussion, 3% Small Group Activities, 6% Guest Speakers, 1% Web Based. Discussion includes critiquing articles
Grading: 10% mid exam, 40% final exam, 45% written homework, 5% in-class presentation.
Exam Format: Exams usually are take-home essay writing.

PubH 6389 Nutritional Epidemiology
2 credit(s);
Instructor: Harnack, Lisa Joan
Description: The course is designed to provide the student with familiarity with the design, conduct, analysis, and interpretation of epidemiologic studies related to nutrition. At the conclusion of this course students will be able to: 1.) Select the most appropriate dietary intake assessment method for a given research question, epidemiologic study design, and study population; 2.) Identify the strengths and limitations of each dietary intake assessment methodology currently available, and understand the implications of the limitations of each method on study results; 3.) Select the most appropriate epidemiologic study designs for various nutrition-related research questions by taking into account the strengths and limitations of various designs in relation to specific nutrition research questions; and 4.) Describe the data analysis and interpretation issues of special importance in nutritional epidemiology studies.
Style: 75% Lecture, 10% Discussion, 15% Small Group Activities.
Grading: 40% final exam, 20% special projects, 40% written homework.
Exam Format: Take home open book exam

PubH 6414 Biostatistical Literacy
A-F only, 3 credit(s);
Instructor: Brearley, Ann M.
Description: PubH 6414 Biostatistical Literacy has the primary goal of developing student ability to read and interpret statistical results in the primary literature of their specific scientific field of interest. This course will involve minimal calculation and offer no formal training in any statistical programming software. Biostatistical Literacy will cover the fundamental concepts of study design, descriptive statistics, hypothesis testing, confidence intervals, odds ratios, relative risks, adjusted models in multiple linear, logistic and Poisson regression, and survival analysis. The focus will be when to use a given method and how to interpret the results, not the actual computation or computer programming to obtain results from raw data.

PubH 6414 Biostatistical Literacy
A-F only, 3 credit(s);
Instructor: Le, Laura Jean
Description: Student may contact the instructor or department for information.

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);  
Instructor: Telke, Susan Elizabe  
Description: Student may contact the instructor or department for information.

PubH 6450 Biostatistics I  
A-F only, 4 credit(s);  
Instructor: Leduc, Robert Edgar  
Description: Student may contact the instructor or department for information.

PubH 6470 SAS Procedures and Data Analysis 
3 credit(s);  
Instructor: Connett, John E  
Description: Student may contact the instructor or department for information.

PubH 6535 Managerial Accounting for Health Services  
A-F only, 3 credit(s);  
Instructor: Forester, Clayton L  
Description: Student may contact the instructor or department for information.

PubH 6541 Statistics for Health Management Decision Making  
3 credit(s);  
Instructor: Abraham, Jean Marie  
Description: Student may contact the instructor or department for information.

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 6562 Information Technology in Health Care
  2 credit(s);
  Instructor: Parente, Stephen T
  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 Healthcare Administration: Lean Healthcare Operation Management
  A-F only, 2 credit(s), max credits 8;
  Instructor: Tracy, Daniel
  Description: Student may contact the instructor or department for information.

PubH 6570 Healthcare Administration: Lean Healthcare Operation Management
  A-F only, 2 credit(s), max credits 8;
  Instructor: Tracy, Daniel
  Description: Student may contact the instructor or department for information.

PubH 6613 Children and Youth With Special Health Care Needs
  2 credit(s);
  Instructor: Grayson, Liane K
  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: Bonilla, Zobeida E.
  Description: Student may contact the instructor or department for information.

PubH 6636 Qualitative Research Methods in Public Health Practice
  2 credit(s);
  Instructor: Bonilla, Zobeida E.
  Description: Student may contact the instructor or department for information.

PubH 6686 Global Reproductive Health
  2 credit(s);
  Instructor: Hellerstedt, Wendy L
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 6700 Foundations of Public Health
3 credit(s);
Instructor: Marmor,Schelomo
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: Quast,Louis Neumann
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 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%
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 6729 Public Health Leadership
OPT No Aud, 1 credit(s);
Instructor: Malcolm,Jan Kathleen
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: 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
PubH 6765 Continuous Quality Improvement: Methods and Techniques
3 credit(s);
Instructor: O'Neill,Kelly Marie
Description: Student may contact the instructor or department for information.

PubH 6780 Topics: Public Health Administration and Policy: Data to Drive Public Health
A-F only, 2 credit(s), max credits 60, 20 completions allowed;
Instructor: Karaca Mandic,Pinar
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 6804 Community Mental Health
2 credit(s);
Instructor: McAlpine,Donna D
Description: Student may contact the instructor or department for information.

PubH 6806 Principles of Public Health Research
2 credit(s);
Instructor: Shippee,Nathan D
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 6835 Principles of Health Policy
2 credit(s);
Instructor: Kozhimannil, Katy Backes
Description: The purpose of this course is to introduce students to the policy environment that influences and shapes public health and the provision of health care services, to enhance understanding of the historical and political context of health policy, to develop strategies for analysis of health policy issues, and to communicate effectively in the policy environment. Through lectures, readings, collaborative debate and discussion, oral presentation, and written work, students will develop the background and skills to approach a range of problems in the interdisciplinary field of public health, where the major policy issues are constantly evolving. As a result, this course aims to convey not just specific facts, but to help students develop the ability and confidence to critically assess current health policy issues in a thoughtful, comprehensive, and rigorous manner. While the course content focuses on the U.S. health care environment, policy analytic and communication skills are presented in a way that is transferrable to other contexts.

PubH 6876 Public Health Systems Analysis and Development
OPT No Aud, 2 credit(s);
Instructor: Kreiger, Robert A
Description: Student may contact the instructor or department for information.

PubH 6877 Public Health Systems Analysis and Development - Practicum
OPT No Aud, 2 credit(s);
Instructor: Kreiger, Robert A
Description: Student may contact the instructor or department for information.

PubH 6900 Topics: Public Health Nutrition: Kid to Comm: Per, Soc and Env Inf 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 and policy recommendations with evidence-based clinical practice guidelines to provide a comprehensive view of maternal and infant nutrition issues from a public health perspective. This course will also provide students with an opportunity to develop public health communications and media skills through a group project.
Style: 80% Lecture, 10% Film/Video, 10% Small Group Activities.
Grading: 60% special projects, 20% in-class presentation, 15% class participation, 5% other evaluation.

PubH 6903 Child and Adolescent Nutrition
2 credit(s);
Instructor: Stang, Jamie Sue
Description: Student may contact the instructor or department for information.

PubH 6905 Nutrition for Public Health Promotion and Disease Prevention
2 credit(s); Grad student or instr consent Credit will not be granted if credit has been received for: PUBH 3905;
Instructor: Steffen PhD, Lyn M
Description: Student may contact the instructor or department for information.

PubH 6915 Nutrition Assessment
PubH 6915 Nutrition Assessment
2 credit(s);
Instructor: Himes, John H
Description: Student may contact the instructor or department for information.

PubH 6920 Foundations of Interprofessional Professional Communication and Collaboration
S-N only, 1 credit(s);
Instructor: Miles, Aida
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: Nelson, Toben F
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: Jones-Webb, Rhonda Jean
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: Hedberg, Craig W
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 7194 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Mandel, Jeffrey H
Description: Student may contact the instructor or department for information.
PubH 7194 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: 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 Culminating Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Toscano PhD, William A
Description: Student may contact the instructor or department for information.

PubH 7194 Culminating Experience: Environmental Health
S-N only, 1-5 credit(s), max credits 25, 5 completions allowed;
Instructor: Stepanov, Irina
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.

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: Maldonado, George
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 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: Stepanov, Irina
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 7296 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 7394 Culminating Experience: Epidemiology
  S-N only, 1-6 credit(s), max credits 6;
  Instructor: Nguyen,Ruby H.N.
  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 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 7396 Field Experience: Epidemiology
  S-N only, 1-5 credit(s), max credits 5;
  Instructor: Lifson,Alan Raymond
  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 7430 Statistical Methods for Correlated Data
  3 credit(s);
  Instructor: Wolfson,Julian
  Description: Correlated data arise in many situations, particularly when observations are made over time and space or on
  individuals who share certain underlying characteristics. In this course, we will study techniques for exploring and
  describing correlated data, along with statistical methods for estimating population parameters (mostly means) from these
  data. We will focus primarily on the class of generalized linear models (both with and without random effects) for normally
  and non-normally distributed data. Wherever possible, techniques will be illustrated using real-world examples. Computing
  will be done using R and SAS.
  Style: 100% Lecture.
  Grading: 33% mid exam, 33% reports/papers, 33% written homework. Final grade is better of (1/3 homework + 1/3
  midterm + 1/3 final project) OR (1/2 homework + 1/2 final project)
  Exam Format: Midterm: In-class, closed-book Final: Take-home data analysis project (~8 pages)
PubH 7445 Statistics for Human Genetics and Molecular Biology
3 credit(s);
Instructor: Reilly,Cavan Sheerin
Description: Student may contact the instructor or department for information.

PubH 7450 Survival Analysis
3 credit(s);
Instructor: Chu,Haitao
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: 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: Bandyopadhyay,Dipankar
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 The Henry Capstone: 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 7591 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 7594 Culminating Experience: Maternal and Child Health
S-N only, 1-4 credit(s), max credits 4;
Instructor: Demerath, Ellen Wrchota
Description: Student may contact the instructor or department for information.

PubH 7691 Independent Study: Maternal and Child Health
S-N only, 1-4 credit(s), max credits 4;
Instructor: Nguyen, Ruby H.N.
Description: Student may contact the instructor or department for information.

PubH 7694 Culminating Experience: Maternal and Child Health
S-N only, 1-4 credit(s), max credits 4;
Instructor: McAlpine, Donna D
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: McAlpine, Donna D
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: Le, Andy
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: 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: 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 7991 Independent Study: Public Health Nutrition
1-4 credit(s), max credits 20, 20 completions allowed;
Instructor: Neumark-Sztainer,Dianne Ruth
Description: Student may contact the instructor or department for information.

PubH 7994 Culminating Experience: Public Health Nutrition
S-N only, 1-6 credit(s), max credits 6;
Instructor: Harnack,Lisa Joan
Description: Student may contact the instructor or department for information.

PubH 7996 Field Experience: Public Health Nutrition
S-N only, 1-6 credit(s), max credits 6, 6 completions allowed;
Instructor: Miles,Aida
Description: Student may contact the instructor or department for information.

PubH 8100 Topics: Applied Analyses of Occupational Health Data
1-4 credit(s), max credits 80, 20 completions allowed;
Instructor: Wattenberg,Elizabeth Vaughn
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 8160 Advanced Toxicology
A-F only, 2 credit(s);
Instructor: Peterson,Lisa Ann
Description: Student may contact the instructor or department for information.
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: Mandel,Jeffrey 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: 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 PhD,William A
Description: Student may contact the instructor or department for information.

PubH 8300 Topics: Epidemiology: Synthesis and App of Methods in Epi Research
3 credit(s), max credits 20, 20 completions allowed;
Instructor: Maclehose,Richard F
Description: This doctoral seminar introduces students to the conceptual foundations of some fundamental issues in epidemiologic methodology. The focus is on how and why a given method, design, or approach might help us explain population health. The emphasis is on the strengths, limitations, and potential alternatives for a given approach. The origins, use, and potential of both classic and cutting-edge methods are considered. Examples and readings are aimed at both clinical/biologic and social/behavioral track students.

PubH 8300 Topics: Epidemiology: Synthesis and App of Methods in Epi Research
3 credit(s), max credits 20, 20 completions allowed;
Instructor: Oakes,Michael
Description: This doctoral seminar introduces students to the conceptual foundations of some fundamental issues in epidemiologic methodology. The focus is on how and why a given method, design, or approach might help us explain population health. The emphasis is on the strengths, limitations, and potential alternatives for a given approach. The origins, use, and potential of both classic and cutting-edge methods are considered. Examples and readings are aimed at both clinical/biologic and social/behavioral track students.

PubH 8341 Advanced Epidemiologic Methods: Concepts
3 credit(s);
Instructor: Oakes,Michael
Description: Student may contact the instructor or department for information.
PubH 8392 Readings in Clinical Research
1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: Reding, Mark Thomas
Description: Student may contact the instructor or department for information.

PubH 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 8401 Linear Models
4 credit(s);
Instructor: Wu, Baolin
Description: Student may contact the instructor or department for information.

PubH 8403 Research Skills in Biostatistics
S-N only, 1 credit(s);
Instructor: Carlin PhD, Bradley Paige
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 8452 Advanced Longitudinal Data Analysis
3 credit(s);
Instructor: Luo, Xianghua
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: Carlin PhD, Bradley Paige
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: Le, Chap T.
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: Banerjee, Sudipto
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 8810 Research Studies in Health Care
3 credit(s), max credits 6;
Instructor: Rockwood,Todd H
Description: Student may contact the instructor or department for information.

PubH 8811 Research Methods in Health Care
3 credit(s);
Instructor: Dowd,Bryan E
Description: Student may contact the instructor or department for information.

PubH 8831 Writing for Research
OPT No Aud, 2 credit(s);
Instructor: Dowd,Bryan E
Description: Student may contact the instructor or department for information.

PubH 8893 Directed Study: Health Services Research, Policy, and Administration
1-3 credit(s), max credits 3, 3 completions allowed;
Instructor: Radosevich 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.
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.

**PubH 8894 Directed Research: Health Services Research, Policy, and Administration**  
1-8 credit(s), max credits 8, 8 completions allowed;  
**Instructor:** McAlpine,Donna D  
**Description:** Student may contact the instructor or department for information.

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**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 3101 Radiographic Procedures I**  
A-F only, 3 credit(s);  
**Instructor:** Anderson,Jill Marie  
**Description:** Student may contact the instructor or department for information.

**Radi 3111 Radiation Physics**  
A-F only, 2 credit(s);  
**Instructor:** Anderson,Jill Marie  
**Description:** Student may contact the instructor or department for information.

**Radi 3301 Clinical Practicum I**  
A-F only, 5 credit(s);  
**Instructor:** Anderson,Jill Marie  
**Description:** Student may contact the instructor or department for information.

**Radi 4101 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 4401 Clinical Practicum IV**  
A-F only, 7 credit(s);  
**Instructor:** Anderson,Jill Marie  
**Description:** Student may contact the instructor or department for information.

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**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 form this lecture will be utilized for any test or grading purposes--although it should enhance their understanding of modern medical diagnosis

Rad 126 Roentgenologic Conference on Chest Diseases
0 credit(s);
Instructor: Juodis, Edward A
Description: Student may contact the instructor or department for information.

Rad 220 Nuclear Medicine: Clinical Conference
0 credit(s);
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Rad 8200 Nuclear Medicine
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Rad 8210 Fundamentals of Nuclear Medicine
1 credit(s);
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Rad 8250 Research: Nuclear Medicine
1-15 credit(s), max credits 15, 1 completion allowed;
Instructor: Anderson, Quentin N
Description: Student may contact the instructor or department for information.

Rec 1501 Orientation to Leisure and Recreation
A-F only, 3 credit(s);
Instructor: Morrissey, Sean Patrick
**Description:** This course is designed as an introduction to the field of recreation and leisure studies through several field trips and service learning opportunities that highlight a variety of recreation programs, facilities, services and delivery systems. An experiential approach allows students to see firsthand the opportunities and careers in the recreation industry. Most class periods will be spent in the field exploring various agencies and meeting with professionals in the industry (YMCA Camp Ihduhapi, Three Rivers Park District - Silverwood & French Regional Park, REI, University Recreation Center, Oxford Community Center, National Sports Center, and Wilderness Inquiry). Students also help to plan events and operate the exciting Gopher Adventure Race (GAR) on-campus!

**Style:** 25% Lecture, 5% Small Group Activities, 40% Field Trips, 5% Guest Speakers, 25% Service Learning.

**Grading:** 15% special projects, 20% attendance, 30% reflection paper, 15% in-class presentation, 20% class participation.

Rec 1905 Freshman Seminar: Go Outside and Play!
- **OPT No Aud, 3 credit(s), max credits 6;**
- **Instructor:** Magnuson PhD, Connie
- **Description:** 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?

Rec 3281 Research and Evaluation in Recreation, Park, and Leisure Studies
- **A-F only, 4 credit(s);**
- **Instructor:** Brown PhD, Tony Kevin
- **Description:** REC 3281 provides a basic overview and working knowledge of research and evaluation and its value in the application and delivery of organized recreation and leisure services. The course explores various approaches, skills, methods, and techniques of research and evaluation. Over the course of the semester, students plan, design, and implement real-life evaluation projects for local recreation agencies and organizations.
- **Style:** 50% Lecture, 25% Discussion, 25% Small Group Activities.
- **Grading:** 10% mid exam, 40% special projects, 40% written homework, 10% additional semester exams.

Rec 3321 Outdoor Recreation 3-Season Skills
- **A-F only, 3 credit(s);**
- **Instructor:** Hoffman, Mitchell Lee
- **Description:** This course is heavily focused on field based leadership. Students will actively plan, lead and learn in an outdoor classroom using outdoor activities as the conduit for teaching and learning.

Rec 3541W Recreation Programming
- **A-F only, 3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Miller, Susie
- **Description:** The emphasis of this course is on the program planning process from creating the idea through the evaluation. Various formats such as leisure learning, field trips and special event participation are highlighted as well as developing the skills needed to produce professional programs for diverse populations. This is a hands-on class and skills acquired and project development learned can be used in a wide variety of recreation settings.

Rec 3796 Senior Internship in Recreation, Park, and Leisure Studies
- **S-N only, 9 credit(s);**
- **Instructor:** Magnuson PhD, Connie
- **Description:** Student may contact the instructor or department for information.

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.

Rec 3993 Directed Study in Recreation, Park, and Leisure Studies
- **A-F only, 1-9 credit(s), max credits 9, 9 completions allowed;**
- **Instructor:** Allison JD, Rayla Mathison
- **Description:** Student may contact the instructor or department for information.
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.

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.

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 4271 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 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 Mathison  
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.

Rehabilitation Science

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 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 5281 Scientific Foundations: Exercise Theory
A-F only, 3 credit(s); Rehabilitation Science grad student; Credit will not be granted if credit has been received for: PT 6281;
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 9, 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 9, 3 completions allowed;
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 9, 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 9, 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
RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Kimberley,PT, PhD, Teresa Jacobson
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 9, 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 9, 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 9, 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 9, 3 completions allowed;
Instructor: Gillick, Bernadette Therese
Description: Student may contact the instructor or department for information.

RSc 5294 Independent Study in Rehabilitation Science
1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Hansen PhD, Andrew
Description: Student may contact the instructor or department for information.

RSc 5814 Age, Exercise, and Rehabilitation
2 credit(s);
Instructor: Snow MD, PhD, LeAnn M
Description: Student may contact the instructor or department for information.

RSc 5841 Rehabilitation Science Instrumentation and Methodology
A-F only, 4 credit(s);
Instructor: Ludewig, Paula M
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Carey, James Robert
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Mathiowetz PhD, Virgil G
Description: Student may contact the instructor or department for information.
RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 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, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Snow MD, PhD, LeAnn M
   Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Kimberley, PT, PhD, Teresa Jacobson
   Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Thompson PhD, LaDora V
   Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Ludewig, Paula M
   Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Lowe, Dawn Annette
   Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Gillick, Bernadette Therese
   Description: Student may contact the instructor or department for information.

RSc 8130 Current Literature Seminar
   A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Hansen PhD, Andrew
   Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
   A-F only, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 3 completions allowed;
   Instructor: Schaber PhD, Patricia Louise
   Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
   A-F only, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 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, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Gillick, Bernadette Therese
Description: Student may contact the instructor or department for information.

RSc 8170 Special Topics in Rehabilitation Science
A-F only, 1-3 credit(s), max credits 9, 3 completions allowed;
Instructor: Hansen PhD, Andrew
Description: Student may contact the instructor or department for information.

RSc 8185 Problems in Rehabilitation Science
1-3 credit(s), max credits 9, 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 9, 3 completions allowed;
Instructor: Schaber PhD, Patricia Louise
Description: Student may contact the instructor or department for information.

RSc 8185 Problems in Rehabilitation Science
1-3 credit(s), max credits 9, 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 9, 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 9, 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 9, 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 9, 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 9, 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 9, 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 9, 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 9, 3 completions allowed;
Instructor: Hansen PhD,Andrew
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: Schaber PhD,Patricia Louise
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: Lowe, Dawn Annette
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: 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: Hansen PhD, Andrew
Description: Student may contact the instructor or department for information.

RSc 8206 Grant Writing
A-F only, 2 credit(s);
Instructor: Lowe, Dawn Annette
Description: Student may contact the instructor or department for information.

Religious Studies

RelS 1034 Introduction to Jewish History and Civilization
3 credit(s); credit will not be granted if credit already received for: RelA 1034, 3034, JwSt 1034, 3034, RelS 3034
Credit will not be granted if credit has been received for: JWST 1034; Meets CLE req of Historical Perspectives
Instructor: 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.

RelS 1201 The Bible: Context and Interpretation
3 credit(s); Credit will not be granted if credit has been received for: RELS 3201; Meets CLE req of Literature
Instructor: STAFF
Description: The Hebrew Bible and Old Testament are literary collections that modern Jewish and Christian traditions maintain as important, but these collections were initially produced by ancient Israelite scribes who composed and/or compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable
time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

**RelS 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.

**RelS 3070 Topics in Religious Studies: Religions, Rites, and Sites**

3 credit(s), max credits 6;

**Instructor:** Kilde, Jeanne Halgren

**Description:** Course Description: What do religious people do? And where do they do it? Pilgrimages to Mecca, to the Holy Land, to Lourdes. Prayer in churches, mosques, synagogues, temples, and gurdwaras. Offerings to deity figures in shrines, to religious leaders online, to the poor in soup kitchens. Healings in sickrooms, in caves, on church stages, in television studios. Religions consist of practices and places -- actions and locations. While most religious studies courses focus on religious thought, this course turns the tables to examine practices. Our focus will be on three specific types of rituals -- pilgrimage, healing, and worship rituals -- and the spaces in which they are performed. We will be examining Christian, Muslim, Hindu, Buddhist, Vodou, and indigenous examples. We will learn about and employ several methodological approaches, paying particular attention to the sensual and physical character of religious practices and places that engage movement, hearing, sight, touch, and smell. Ethnographic research at religious sites will be required. We will also examine the ways in which practices and places function to create, enhance, and maintain power relations among lay and clerical leaders, and between worshippers and the deities they address.

**Style:** 40% Lecture, 15% Film/Video, 40% Discussion, 5% Field Trips.

**Grading:** 60% mid exam, 20% reports/papers, 20% quizzes.

**Exam Format:** All exams are take-home, essay format.

**RelS 3070 Topics in Religious Studies: Atheists and Others in the U.S.**

3 credit(s), max credits 6;

**Instructor:** Edgell, Penny A

**Description:** What does it mean to be an atheist in the United States today? Atheists comprise a small percentage of the American population, but one with an increasingly visible presence online, in the media, and in everyday life. How do atheists organize into groups oriented toward identity-formation, social connection, and political action? What are Americans’ attitudes toward atheists and atheism, and are these attitudes changing? Recent scholarship has shown that atheists are understood by many Americans as religious and cultural ‘outsiders,’ and argues that attitudes toward atheists reveal the centrality of religion in dominant understandings of national identity and citizenship. But the American religious landscape is changing in fundamental ways. A growing percentage of Americans claim no religious identity. And among younger Americans, a choice to remain religiously uninvolved is associated with greater social tolerance of a wide range of formerly stigmatized out-groups. These changes in religiosity are creating a different kind of environment for the expression of an atheist identity. Responding, in part, to these changes, new groups and organizations are emerging which further raise the visibility of atheism. We will examine this changing religious landscape and the implications it has for atheists and other religious ‘outsiders’ in American life. The course begins with an overview of the American religious landscape, including historical changes in religious belief and belonging and scholarly work on religion’s connection with national identity in the American context. We then examine recent research on the growing percentage of Americans who claim no religious identity, on atheist organization and identity-formation, and on attitudes toward atheists and other religious out-groups. Throughout the course, we engage with sociological debates about secularization in the late-modern context.

**Style:** 50% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation.

**Grading:** 30% mid exam, 30% final exam, 20% in-class presentation, 20% class participation.

**RelS 3071 Greek and Hellenistic Religions**
Instructor: Sellew, Philip
Description: A survey of ancient Greek religion from the Bronze Age down to Hellenistic times. The approach is both historical and thematic. Topics include pre-historic religion; Homer and the Olympian deities; archaeology of cult; music, dance, and procession as ritual performance; prayer and sacrifice; temple architecture and sanctuaries; oracles; beliefs about death and the afterlife; mystery cults; philosophical religion; criticism of traditional myths; Alexander and ruler cult; astrology and magic; and Near Eastern salvation religions. We pose questions of Greek tragedy and comedy, satire and pious hymnody. Extensive use of Homer, Sappho, Pindar, Aeschylus, Euripides, and Plato allows us to hear distinct voices within the overall Greek social and religious variety. We study the use of architectural space to define and express divisions between sacred and profane. The visual arts are of central importance, to help us both see? these foreign or familiar gods and goddesses heroes and heroines, as well as ?query? the ordering principles they represent. Sculpture, vase painting, gems, and coins are all brought into the picture.

Style: 85% Lecture, 10% Discussion, 5% Field Trips.
Grading: 15% mid exam, 20% final exam, 45% reports/papers, 5% special projects, 15% additional semester exams.
Exam Format: Brief IDs and short answer questions; one essay.

RelS 3072 The New Testament
Instructor: STAFF
Description: This course will introduce the basics of reading the New Testament and contextualizing these writings within their ancient political, social, religious and cultural contexts. We will attend to the details of the genre, literary features (language, imagery, metaphors, plot, setting, characterization and rhetoric), and religious dimensions of these texts in order to appreciate the varied perspectives within the collection of documents that make up the New Testament. We will also introduce various modern critical methods of biblical interpretation. Taught by Prof. Stephen Ahearne-Kroll

RelS 3201 The Bible: Context and Interpretation
Instructor: STAFF
Description: The Hebrew Bible and Old Testament are literary collections that modern Jewish and Christian traditions maintain as important, but these collections were initially produced by ancient Israelite scribes who composed and/or compiled the biblical texts at particular time periods in the ancient Near East. This course will introduce the academic study of biblical texts, which demands critical analysis of the literature and an openness to reading the literature from the perspective of ancient Israelite writers (who lived in a world far different from today). The course will spend considerable time on the literary (and scribal) composition of biblical prose texts; time will also be spent on the historical circumstances of biblical prophets and on the significance of wisdom literature. This course fulfills the Liberal Education Requirement of Literature in that the course examines the Hebrew Bible/Old Testament as ancient literature, asking questions about its language and meaning in its social and historical contexts. This course will only address the ancient setting of the biblical texts and not re-interpretations in Jewish or Christian traditions. Given the scope of the course, modern interpretations of the biblical literature will not be discussed; we will only focus on this literature in its ancient setting.

RelS 3204 Dead Sea Scrolls
Instructor: STAFF
Description: In the mid-twentieth century, fragments from roughly 900 manuscripts (or scrolls) were discovered in caves near the Dead Sea; they date from the late third century B.C.E. to the first century C.E., and the vast majority were composed in Hebrew (some in Aramaic and even fewer in Greek). In reading selected portions of these scrolls (in translation), this course will focus on the key ways that the discovery of these scrolls significantly changed the study of Judaism during Hellenistic and Roman rules. Namely, the course will examine how the scrolls have changed scholars’ views about the transmission of biblical texts in antiquity and the extent to which the literary production of Jewish authoritative writings continued during this time period. The course will also examine the Jewish sectarian writings of the Dead Sea Scrolls and the scholarly debate about the archaeological site of Qumran, which was a settlement near some of the caves where the scrolls were found.

RelS 3321 American Indian Philosophies
Instructor: Ghebregzi, Alex Anthony
Description: The purpose of this course is to introduce students to the philosophical thought and spiritual beliefs of native peoples of North America. Students will examine a broad spectrum of issues which influence the worldview of native people on this continent, including European contact and thought. Students may find some of the issues to be controversial and personally challenging, however, a thorough discussion of the impact of European influences is important to
understanding native people’s resistance and survival. Finally, students will also explore the ways in which native philosophy and spiritual practices shape native life experience in a society viewed by many native people as being at odds with their beliefs.

**Style:** 60% Lecture, 20% Discussion. Group work

**Grading:** 33% mid exam, 33% final exam, 17% reports/papers, 17% class participation.

**Exam Format:** The exams will be a take home essay.

**RelS 3502 Ancient Israel: From Conquest to Exile**

3 credit(s); Hebrew not required; 3501 recommended credit will not be granted if credit already received for: CNES 3502, CNES 5502, RELA 3502, HIST 3502

**Instructor:** von Dassow, Eva

**Description:** Israel and Judah were not states of great importance in the ancient Near East. Their population, territory, and economy were small, and they could not resist conquest by larger, more powerful states like Assyria and Rome. So why is their history significant still? The historical experiences of the people of ancient Israel and Judah were transmogrified in literary form into the Hebrew Bible (Old Testament), which became the foundation and wellspring for much of Western and Islamic civilization. Innumerable aspects of modern history and culture are predicated on some element of Israel's ancient past, as mediated to us through the Bible; so it behooves us to understand that past. But the Bible is a religious work, not a transcript of events, and it is not the only source of information about ancient Israel. Archaeological excavations have revealed the physical remains of the cultures of Israel and neighboring lands, as well as bringing to light documents, inscriptions, and literary works produced by these cultures. This course treats the history of ancient Israel and Judah from the Late Bronze Age through the period of Roman rule, on the basis of archaeological, epigraphic, and literary sources. Historical study entails inquiring into the ideology of the sources, including the Bible. Implicit in the methods of inquiry are questions about how historical knowledge is created. Students taking the course for graduate credit will do additional reading and a research paper.

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

**Grading:** 20% final exam, 45% reports/papers, 20% quizzes, 15% class participation.

**Exam Format:** Essays, short IDs, maps

**RelS 3612 Baroque Rome: Art and Politics in the Papal Capital**

3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335; Meets CLE req of Historical Perspectives

**Instructor:** Ostrow, Steven F

**Description:** This course explores the center of baroque culture—Rome—as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world’s great capitals.

**RelS 3622 'Sinners, Saints, and Savages': Religion in Early America**

3 credit(s); Non-fr or instr consent

**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 (k.fischer@umn.edu).

**Style:** 25% Lecture, 5% Film/Video, 60% Discussion, 10% Small Group Activities.

**Grading:** 75% reports/papers, 5% attendance, 20% class participation.

**RelS 3715 History of the Crusades**

3 credit(s); Credit will not be granted if credit has been received for: HIST 3613;

**Instructor:** Lower, Michael

**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:** 45% Lecture, 10% Film/Video, 45% Discussion.

**Grading:** 20% mid exam, 30% final exam, 20% reports/papers, 20% written homework, 10% attendance. Informal writing assignments and class participation

**Exam Format:** Essay

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**RelS 3719 Jews and Muslims in Medieval Iberia**

3 credit(s); Credit will not be granted if credit has been received for: SPAN 3603; Meets CLE req of Arts/Humanities

**Instructor:** Hamilton, Michelle Marie

**Description:** This course fulfills the Liberal Education requirement in Arts/Humanities. This course examines the cultural production of Sephardic Jews and Andalusi Muslims. Through a reading of the poetry of such authors as al-Mutamid, Ibn Khafaja, Samuel ha-Nagid and Moses Ibn Ezra, the prose fiction of al-Saraqusti, Judah al-Harizi and Juan Ruiz, and the philosophical treatises of Ibn Tufayl, Averroes and Maimonides we will explore how the extensive cultural assimilation among these groups in medieval al-Andalus complicates notions of identity (confessional, linguistic and ethnic), subalterity and postcoloniality commonly associated with modernity. While the Arab Andalusi scholars whose works we read combine ideas from the Muslim East (Baghdad) with both Greco-Roman and what we think of Western European traditions to create what scholars of both Spanish and Arabic literature and culture recognize as uniquely Andalusi, the Jewish authors of al-Andalus take this unique Arabo-Andalusi tradition and adapt it to their own inherited cultural traditions to create a corpus of literary, philosophical and theological works that ultimately changed the nature of Judaism itself. Even once most of the courts and lands of Muslim al-Andalus had been conquered by Christians, these Andalusi traditions survived thanks to one of the most impressive translation movements of the Middle Ages, namely that of eleventh- through thirteenth-century Toledo, and in later centuries thanks to the diligent activities of the Muslim and Jewish minorities living in Christian lands, who were often forced to hide their literature and practice their religious rituals in secret. In the final weeks of the class we will explore how the literary, historical, philosophical and theological works of the major Jewish and Muslim thinkers of medieval Iberia studied in the first part of the class survived in different forms among later Spanish Christian intellectuals. Taught in English.

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**RelS 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.

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**RelS 4952 Final Project**

A-F only, 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.

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**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.

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**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.

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

RelS 4952 Final Project  
**Description:** Student may contact the instructor or department for information.

RelS 4952 Final Project  
**Description:** Student may contact the instructor or department for information.

RelS 5252 Art and Archaeology of Early Christianity and the Late Roman Empire  
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5188;  
**Description:** This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

RelS 5612 Baroque Rome: Art and Politics in the Papal Capital  
3 credit(s); Credit will not be granted if credit has been received for: ARTH 5335;  
**Description:** This course explores the center of baroque culture--Rome--as a city of spectacle and pageantry. The urban development of the city, as well as major works in painting, sculpture, and architecture, are considered within their political and religious context, with special emphasis on the ecclesiastical and private patrons who transformed the Eternal City into one of the world's great capitals.

RelS 5993 Directed Studies  
1-4 credit(s), max credits 24, 24 completions allowed;  
**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
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  
3 credit(s); Meets CLE req of Civic Life and Ethics  
Instructor: STAFF  
Description: A liberal education has the goal of preparing students to develop both practical skills such as problem-solving, ability to effectively communicate, and the ability to apply information to everyday life, as well as to develop a sense of who they are as citizens of a community. This course has been designed specifically for first year students to reflect on the ethical perspectives that shape decision making about an everyday product: apparel. The apparel industry is the context used to examine our own ethical viewpoints and the meaning of citizenship. We document how public engagement has impacted the moral issues that historically evolved within this industry and how public engagement can be used to shape and change contemporary industry practices. Specifically, students address the following: what is the concept of ethics and how does it differ from other related terms (e.g., morality, legality, self-interest, codes of conduct)? What are common ethical viewpoints and how have they developed? What ethical view(s) most closely align with their own? How did they develop their view(s)? What does it mean to behave ethically? How does a shared ethic develop within a community or organization? What is corporate culture? How does the culture of an organization promote ethical behavior? How do problems evolve within the apparel industry and what role does ethics and engagement in everyday life play in perpetuating or solving these problems?

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: STAFF
Description: This class is ideal for Retail Merchandising 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.
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.

RM 3242 Retail Buying
A-F only, 3 credit(s);
Instructor: Park, MinJung
Description: This course is an overview of the merchandising principles and mathematics needed for retail planning, buying, and selling.
Style: 55% Lecture, 10% Discussion, 10% Small Group Activities, 5% Guest Speakers, 20% Web Based.
Grading: 29% mid exam, 29% final exam, 14% quizzes, 28% written homework.

RM 3243 Visual Merchandising
A-F only, 3 credit(s);
Instructor: STAFF
Description: Students will use Mockshop, a virtual 3D store modeling software package, to conceptualize and design store interior, layout, fixtures, lighting, signs, merchandising planograms based on an understanding of visual merchandising concepts, theories, planning, strategies, techniques, store image, and target market. Students will work with industry partners on window display and merchandise presentation course projects.

RM 4123 Living in a Consumer Society
A-F only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: Materialist consumerism has become one of the defining characteristics of American society. Consumption and the purchase of material possessions are central aspects of who we are, who we dream of being, how we interact with each other, and how we affect the larger environment. The purpose of this course is to provide exposure to a number of selected topics surrounding contemporary consumer society. Students will also have the opportunity to extend their thinking regarding consumer issues/problems to socially responsible business practices. 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 presentations.

Style: 5% Film/Video, 50% Discussion, 30% Small Group Activities, 5% Student Presentation, 10% Web Based.
Grading: 30% mid exam, 30% final exam, 10% reports/papers, 15% in-class presentation, 15% class participation.
Exam Format: Students will take two take-home essay exams assessing understanding and application of material in the course.

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

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

RM 4160H Honors Capstone Project
A-F only, 2 credit(s), max credits 4;
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, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Johnson PhD,Kim KP
Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Wu,Juanjuan
Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
Instructor: Im,Hyunjoo
Description: Student may contact the instructor or department for information.

RM 4196 Internship in Retail Merchandising
S-N only, 1-2 credit(s), max credits 2, 1 completion allowed;
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.

RM 4248 Creative Leadership in Retailing
A-F only, 3 credit(s);
Instructor: Kim, Hye-Young
Description: Welcome to RM 4248 Creative Leadership in Retailing! This course offers a unique blend of theory and application. The purpose of this course is to expose students to theory and research on creative leadership as well as opportunities to apply that knowledge to contemporary issues facing practicing retail leaders. Our study of theory will be punctuated with the additional insights of successful leaders in the retail industry. You will also have the opportunity to develop specific leadership skills that are of particular interest to you and to practice these skills in class activities and assignments. Our emphasis throughout the course will be on applying leadership theory to your real-life experiences, while at the same time looking ahead to your future leadership roles in retailing.
Style: 25% Discussion, 30% Small Group Activities, 20% Student Presentation, 5% Guest Speakers, 20% Web Based.
Grading: 15% mid exam, 15% final exam, 10% reports/papers, 30% quizzes, 10% written homework, 10% in-class presentation, 10% class participation.
Exam Format: Students will take two take-home essay exams assessing understanding and application of material in the course.

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: Jahn, Gary R
Description: See the course URL

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 3001 Intermediate Russian I
5 credit(s); 1102 or instr consent Credit will not be granted if credit has been received for: RUSS 4103;
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
participation.
Exam Format: fill-in-the-blank, short essay, translation from English to Russian, answering questions

Russ 3311 Russian Major Project
A-F only, 3 credit(s); Advanced Russian majorCredit will not be granted if credit has been received for: RUSS 3311H;
Instructor: STAFF
Description: This 3-credit course is designed for and required of all students majoring in Russian, except for Honors
students (see Russ 3312). It consists of writing a research paper of no less than 20 typed double-spaced pages, under the
guidance of two faculty members in the Russian program. Topics are chosen by students in consultation with their faculty
advisors. Students have scheduled individual meetings with the advisors. The Director of Undergraduate Studies
coordinates all projects, and students should consult her/him before signing up for the course. Projects should show
evidence of original thinking, the ability to use secondary sources (critical and scholarly literature) appropriately, and the
ability to analyze and present arguments effectively. Unacceptable projects include book reports, plot summaries, or
translations. The project should be linked to the student's course work within the Russian major, i.e. the student should
have some academic background in a particular area before undertaking to write a paper in that area. The language of the
paper should be English. The paper should, however, present evidence of appropriate use of Russian-language sources.

Russ 3311H Honors Major Project in Russian
A-F only, 3-4 credit(s), max credits 4, 1 completion allowed; Advanced Russian majorCredit will not be granted if
credit has been received for: RUSS 3311;
Instructor: STAFF
Description: This course is designed for and required of all Honors students majoring in Russian. It consists of writing a
research paper of no less than 35 typed double-spaced pages, under the guidance of two faculty members in the Russian
program. Candidates for summa cum laude need three faculty readers, one of who should be outside the Russian
department. Topics are chosen by students in consultation with their faculty advisors. Students have scheduled individual
meetings with the advisors. The Director of Undergraduate Studies coordinates all projects, and students should consult her/him before signing up for the course. Projects should show evidence of original thinking, the ability to analyze, and to
present arguments effectively. Unacceptable projects include book reports, plot summaries, or translations. The project
should, in some way, be linked to the student's course work within the Russian major, i.e., the student should have some
academic background in a particular area of study before undertaking to write a paper in that area. The language of the
paper should be English. The paper should present evidence of appropriate use of Russian-language sources.
Style: 25% Discussion. guided research
Grading: 100% other evaluation. finished research paper

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 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
3 credit(s); Meets CLE req of Arts/Humanities; meets CLE req of Global Perspectives
Instructor: STAFF
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.

**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 student Credit will not be granted if credit has been received for: RUSS 1101;
Instructor: Jahn,Gary R
Description: See the course URL

**Russ 4101 Beginning Russian I**
3 credit(s); Fourth sem course in another language or grad student Credit will not be granted if credit has been received for: RUSS 1101;
Instructor: Krylova,Natalia V
Description: Student may contact the instructor or department for information.

**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 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: Krylova, Natalia V
Description: Student may contact the instructor or department for information.

**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: Clayton, Nadya
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.

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**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

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**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.

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**Scan 3602 The Literary Fairy Tale in Scandinavia**
3 credit(s);Meets CLE req of Literature

**Instructor:** Banks,William

**Description:** This course examines the presence of the literary genre of the fairy tale in the Scandinavian countries from its roots in the early 19th century up to the present. In the first half we shall focus on the Norwegian tales recorded from the oral tradition by the great Norwegian folklorists Peter Christian Asbj?rmesen and J?rgen Moe, as well as, of course, the more purely literary ventures of Hans Christian Andersen. In the second half of the course we shall shift emphasis to 20th and 21st century experiments with the genre, including short texts by Isak Dinesen, Henrik Pontoppidan, Jonas Lie, and Svava Jakobsdottir as well as novels by Tove Jansson (Comet in Moominland), Astrid Lindgren (Ronia, the Robber?rs Daughter) and Johanna Sinisalo (Troll: A Love Story). Additionally in this latter half we shall take a look at a number of tales from the Sami and Inuit traditions, as well as three films; Nils Gaup?s Pathfinder, Lars von Trier?s Breaking the Waves, and Andre ? vredal?s recent Trollhunter. Reading load is approximately 100-125 pages per week, written work includes in-class midterm and final exams as well as a term paper.

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**Scan 3614 Blood on Snow: Scandinavian Thrillers in Fiction and Film**
3 credit(s);Credit will not be granted if credit has been received for: SCAN 5614;Meets CLE req of Global Perspectives; meets CLE req of Literature
**Instructor:** Zagar, Monika  
**Description:** In this course for undergraduates we will tackle the question why Scandinavian crime fiction has become so popular during the past few decades domestically and abroad. Why is Henning Mankell's Kurt Wallander, for instance, one of the most popular international literary police detectives of his generation? Why is *The Girl with the Dragon Tattoo* a worldwide success? This phenomenal popularity stands in stark contrast to the Nordic countries' low crime rates and their peaceful social-democratic welfare states. This course will explore such paradoxical questions through reading, viewing, and discussing crime novels and films. Students will analyze, discuss, and compare literary texts and films from the Nordic countries against their cultural and political backdrops. Both national and international dimensions of the material will be considered, especially in comparing Scandinavian and American versions of such stories as Insomnia or *Faceless Killers*. Students will be exposed to major female crime writers, from both the past and present. Among them are Camilla Collett, Amalie Skram, Selma Lagerlof, Knut Hamsun, Ellen Key, Edith Sodergran, Moa Martinson, Karen Blixen, Kerstin Ekman, Svava Jakobsdottir, Rosa Liksom. This course is designed for undergraduate students in Scandinavian Literature, Gender Studies and Comparative Literature. Many of Scandinavia's most important writers have engaged in issues of sexual difference and women's emancipation. The aim of this course is to reflect the discussion of women's emancipation through literary texts, and to discuss the intertwining of progressive thought and literary representation. The concept of emancipation is to be understood in a broad sense: some of these writers demanded political authority and social rights while others were focused on personal and/or sexual freedom. The works were chosen because of their literary qualities and their progressive ideas. We will focus on some major women authors, and a couple of male ones, from the 19th century to the present. The course is limited to texts that have been translated into English. Students of Scandinavian will have the possibility to read in the original languages as well. Writers included in the course are: Camilla Collett, Amalie Skram, Selma Lagerlof, Knut Hamsun, Ellen Key, Edith Sodergran, Moa Martinson, Karen Blixen, Kerstin Ekman, Svava Jakobsdottir, Rosa Liksom. This course is designed for undergraduate students in Scandinavian Literature, Gender Studies and Comparative Literature.  
**Style:** 40% Lecture, 50% Discussion. 20% viewing of visual materials.  
**Grading:** 30% mid exam, 50% final exam, 20% final paper.
Scan 5614 Blood on Snow: Scandinavian Thrillers in Fiction and Film  
3 credit(s); Credit will not be granted if credit has been received for: SCAN 3614;  
Instructor: Zagar, Monika  
Description: In this course for undergraduates we will tackle the question why Scandinavian crime fiction has become so popular during the past few decades domestically and abroad. Why is Henning Mankell's Kurt Wallander, for instance, one of the most popular international literary police detectives of his generation? Why is <i>The Girl with the Dragon Tattoo</i> a worldwide success? This phenomenonal popularity stands in stark contrast to the Nordic countries' low crime rates and their peaceful social-democratic welfare states. This course will explore such paradoxical questions through reading, viewing, and discussing crime novels and films. Students will analyze, discuss, and compare literary texts and films from the Nordic countries against their cultural and political backdrops. Both national and international dimensions of the material will be considered, especially in comparing Scandinavian and American versions of such stories as Insomnia or <i>The Girl with The Dragon Tattoo</i>. Required Books: <i>Arnaldur Indridason</i>, <i>Jar City</i> (Iceland, 2000) Maj Sjöwall and Per Wahlöö, <i>The Laughing Policeman</i> (Sweden, 1968) Henning Mankell, <i>Faceless Killers</i> (Sweden, 1997) Karin Fossum, <i>Don't Look Back</i> (Norway, 1996) Andrew Nestingen.  
Required Films: <i>Jar City</i> (Iceland, 2007) <i>Insomnia</i> (Norway, 1997); <i>Insomnia</i> (USA, 2002) <i>Smilla's Sense of Snow</i> (Germany-Sweden-Denmark, 1997) <i>The Girl with the Dragon Tattoo</i> (Sweden, 2009); <i>The Girl with the Dragon Tattoo</i> (USA, 2011) <i>Faceless Killers</i> (Sweden, Sveriges Television, 1994); <i>Faceless Killers</i> (BBC, 2010)  
Style: 30% Lecture, 50% Discussion. 20% viewing of visual materials  
Grading: Grade: 20% response papers, 20% class participation, 20% in-class presentation, 20% final exam, 20% final paper.  

Scan 5634 Scandinavian Women Writers  
3 credit(s); Credit will not be received for: SCAN 3634; Meets CLE req of Global Perspectives  
Instructor: Zagar, Monika  
Description: Scandinavian Women Writers and the Emancipation  
Many of Scandinavia's most important writers have engaged in issues of sexual difference and women's emancipation. The aim of this course is to reflect the discussion of women's emancipation through literary texts, and to discuss the intertwining of progressive thought and literary representation. The concept of emancipation is to be understood in a broad sense: some of these writers demanded political authority and social rights while others were focused on personal and/or sexual freedom. The works were chosen because of their literary qualities and their progressive ideas. We will focus on some major women authors, and a couple of male ones, from the 19th century to the present. The course is limited to texts that have been translated into English. Students of Scandinavian will have the possibility to read in the original languages as well. Writers included in the course are: Camilla Collett, Amalie Skram, Selma Lagerlof, Knut Hamsun, Ellen Key, Edith Sodergran, Moa Martinson, Karen Blixen, Kerstin Ekman, Svava Jakobsdottr, Rosa Liksom. This course is designed for undergraduate students in Scandinavian Literature, Gender Studies and Comparative Literature.  
Style: 40% Lecture, 15% Film/Video, 40% Discussion, 5% Student Presentation. discussion includes small group activities  
Grading: 30% mid exam, 50% reports/papers, 20% class participation.  

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 (320 Folwell). On this form, they specify the topic, reading and study materials, and form of evaluation.
SciC 8190 Supercomputer Research Seminar  
1 credit(s), max credits 3, 3 completions allowed;  
Instructor: Dumitrica, Traian  
Description: Supercomputing Research (SciC8190)?Simulations in Materials, Chemistry, and Biology? 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.

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 8109 Cybersecurity Foundations - Technology, Risk & Communication  
A-F only, 2 credit(s);  
Instructor: Johnson, Michael Paul  
Description: Student may contact the instructor or department for information.

ST 8111 Methods, Theory, and Applications  
A-F only, 2.5 credit(s);  
Instructor: Isle, Brian Archer  
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: Welles, George William  
Description: Student may contact the instructor or department for information.

ST 8221 Communications of Risk and Security  
A-F only, 1 credit(s);  
Instructor: Laingen, Charles Winslo  
Description: Student may contact the instructor or department for information.

ST 8331 Dynamic Systems Modeling and Simulation Tools  
A-F only, 2 credit(s);  
Instructor: 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: Welles, George William  
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
SW 1905 Freshman Seminar
   2 credit(s), max credits 6;
   Instructor: Baizeleman, 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: Isler, Hilal
   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
The 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**
- **3 credit(s);**
- **Instructor:** Hollister,David
- **Description:** Student may contact the instructor or department for information.

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

SW 8010 Seminar: Field Practicum I
S-N only, 1-8 credit(s), max credits 8;
Instructor: 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: Gebremeskel, Milena
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 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: Gebremeskel, Milena
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: Jones, Linda E
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: Gebremeskel, Milena
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 8151 Social Work Methods: Practice With Individuals and Systems
A-F only, 2 credit(s);
Instructor: Dimock,Peter Trier
Description: Student may contact the instructor or department for information.

SW 8151 Social Work Methods: Practice With Individuals and Systems
A-F only, 2 credit(s);
Instructor: Rooney,Ronald H
Description: Student may contact the instructor or department for information.

SW 8151 Social Work Methods: Practice With Individuals and Systems
A-F only, 2 credit(s);
Instructor: 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 M.
Description: Student may contact the instructor or department for information.

SW 8152 Social Work Practice Methods: Families and Groups
A-F only, 2 credit(s);
Instructor: 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 8152 Social Work Practice Methods: Families and Groups
A-F only, 2 credit(s);
Instructor: Lewis-Dmello,Angela Kate
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 8153 Models of Community Intervention
A-F only, 1 credit(s);
Instructor: Moua,Kao Nou Linda
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.
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
<th>Instructor</th>
<th>Description</th>
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<tr>
<td>SW 8154</td>
<td>Organizations and Policy Advocacy</td>
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<td>Sugrue, Erin Patricia</td>
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<td>SW 8154</td>
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<td>SW 8251</td>
<td>Social Work Practice in Health, Disabilities, and Aging</td>
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<td>Remke, Stacy S.</td>
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<tr>
<td>SW 8252</td>
<td>Advanced Interventions and Issues in Health, Disabilities, and Aging (HDA)</td>
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<td>Remke, Stacy S.</td>
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<tr>
<td>SW 8262</td>
<td>Empowerment Practice With Persons With Disabilities</td>
<td>3</td>
<td>Lightfoot, Elizabeth Bradford</td>
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<tr>
<td>SW 8351</td>
<td>Advanced Practice I: Families and Children</td>
<td>3</td>
<td>Zuel, Timothy Brett</td>
<td>Student may contact the instructor or department for information.</td>
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<tr>
<td>SW 8351</td>
<td>Advanced Practice I: Families and Children</td>
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<td>Rooney, Ronald H</td>
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<tr>
<td>SW 8352</td>
<td>Advanced Practice II: Families and Children</td>
<td>3</td>
<td>Hoy, Judith M</td>
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<tr>
<td>SW 8361</td>
<td>Identification and Assessment of Family Violence</td>
<td>3</td>
<td>Witt, Jennifer Lynn</td>
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<tr>
<td>SW 8451</td>
<td>Assessment and Engagement in Clinical Social Work Practice</td>
<td>3</td>
<td>Stiber, Jill M</td>
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<tr>
<td>SW 8452</td>
<td>Core Concepts in Clinical Social Work Practice</td>
<td>3</td>
<td>Shannon, Patricia Jean</td>
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<tr>
<td>SW 8452</td>
<td>Core Concepts in Clinical Social Work Practice</td>
<td>3</td>
<td>Caruso, Beverly Jean</td>
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SW 8461 Advanced Clinical Social Work Practice with Adults
  A-F only, 3 credit(s);
  Instructor: Berven, Shelley Sears
  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: Lundquist, Melissa Ann
  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: Pinna PhD, Keri Lynn 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: 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: 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 8861 Theory and Model Development in Social Work
  A-F only, 3 credit(s);
  Instructor: Renner, Lynnette M.
  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);
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: Liebler, Carolyn
Description: In this course, the student is encouraged to develop his or her sociological imagination and to apply it to the world around us. In the first section of the semester, we focus on ways in which culture, socialization, social interactions, and social control affect our day-to-day lives. Then we investigate the impacts of four key master statuses: social class, gender, race, and living as an American. These master statuses have fundamental but sometimes subtle effects on the opportunities and constraints that each of us face. In the final section of the course, we focus on a variety of other aspects of the social world (family, education, and globalization, for example) to further understand how personal troubles can be seen and analyzed as public issues using core theories and the student's sociological imagination.
Style: 50% Lecture, 10% Film/Video, 30% Discussion, 10% Small Group Activities.
Grading: 16% mid exam, 16% final exam, 24% reports/papers, 16% additional semester exams, 14% class participation, 14% laboratory evaluation.
Exam Format: Multiple choice questions, short answer, and short essay

Soc 1001 Introduction to Sociology
4 credit(s); Soc majors/minors must register A-F
Credit will not be granted if credit has been received for: SOC 1011V; Meets CLE req of Diversity and Soc Justice US; meets CLE req of Social Sciences
Instructor: Logan, Enid
Description: This course is an introduction to the fascinating field of sociology. The broad aim of the class is for students to learn to develop and deploy their ?sociological imagination,? in order to better understand and participate in the social world. Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and ask how and why people interact within these contexts. In this class you will read the works of classical and contemporary theorists, view sections of documentary films, and engage in debate and discussion with your peers and professor. You will learn to use a sociological lens in analyzing many of the cultural, economic and political phenomena that surround us every day. You will question things that may have never before seemed strange, and you will begin to make ?sociological sense? of things that you may have always before questioned. By the end of the course, you will be familiar with the sociological toolkit-- the core concepts, methods, and theories of the discipline?and be able to begin to use this toolkit to make sense of the world around you.
Style: 40% Lecture, 15% Film/Video, 25% Discussion, 20% Laboratory.
Grading: 20% mid exam, 20% final exam, 20% reports/papers, 20% class participation, 20% laboratory evaluation.
Exam Format: true false and essay

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: Abdi, Cawo
Description: This course introduces 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 between 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/and hinder change. A key objective of this course is to foster students’ critical thinking abilities in their analysis of societal issues, and in their articulations of these issues. Students are expected to be able to apply sociological theories and debates into their everyday practices.
Style: 50% Lecture, 20% Film/Video, 30% Discussion, videos
Grading: 20% final exam, 30% quizzes, 30% reflection paper, 10% class participation, 10% laboratory evaluation. reaction papers
Exam Format: Short answer format
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 between 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. Course aims to foster students' "sociological imagination," or their ability to apply sociological theories into their everyday lives. This is a writing intensive course. Students will have an opportunity to obtain feedback on their work in order to improve their writing through revision. Students are also expected to play a greater role in class discussions.

**Style:** 40% Lecture, 25% Film/Video, 30% Discussion, 5% Small Group Activities.

**Grading:** 20% mid exam, 20% final exam, 10% quizzes, 30% reflection paper, 20% class participation.

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**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.

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**Soc 1905 Freshman Seminar: Not Just Child's Play**

A-F only, 3 credit(s);

**Instructor:** Swartz, Teresa Toguchi

**Description:** Not Just Child’s Play: The Serious Side of Kids’ Culture and Activities. Soccer practice, hockey games, lego leagues, dance recitals, cartoons, toys, friends, school, and video games. These are the activities that fill children’s days, and that we often remember fondly. But children’s activities and culture also have a serious side. While providing opportunities for fun, socializing, and development, children’s everyday pursuits also teach them important lessons about values, goals, competitiveness, inclusion-exclusion, consumption, race, class, gender, and much more. In this course we will explore children’s culture and activities, paying attention to the ways they influence children’s identities, relationships, priorities, aspirations, as well as the ways in which they reflect and reproduce inequalities. We will read from both popular and academic sources, while we take a deeper look at youth sports, schools, families, toys and consumer culture, media, friendships, competitions, as well as other relevant topics. Students will have the opportunity to reflect upon and analyze their own experiences as children and youth, as well as gather and analyze new data using sociological research methods and approaches. Professor Swartz is a part of an interdisciplinary team conducting research on children’s activities, and students will have the opportunity to engage in this or similar research. This seminar will be largely discussion based, and students will develop their critical thinking, analysis, writing, and oral communication skills. Course assignments will include readings, exams, papers/reports, and short presentations.

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**Soc 3090 Topics in Sociology: Atheists & Others in the U.S.**

3 credit(s), max credits 6;

**Instructor:** Edgell, Penny A

**Description:** What does it mean to be an atheist in the United States today? Atheists comprise a small percentage of the American population, but one with an increasingly visible presence online, in the media, and in everyday life. How do atheists organize into groups oriented toward identity-formation, social connection, and political action? What are Americans’ attitudes toward atheists and atheism, and are these attitudes changing? Recent scholarship has shown that atheists are understood by many Americans as religious and cultural ‘outsiders,’ and argues that attitudes toward atheists reveal the centrality of religion in dominant understandings of national identity and citizenship. But the American religious landscape is changing in fundamental ways. A growing percentage of Americans claim no religious identity. And among younger Americans, a choice to remain religiously uninvolved is associated with greater social tolerance of a wide range of formerly stigmatized out-groups. These changes in religiosity are creating a different kind of environment for the expression of an atheist identity. Responding, in part, to these changes, new groups and organizations are emerging which further raise the visibility of atheism. We will examine this changing religious landscape and the implications it has for atheists and other religious ‘outsiders’ in American life. The course begins with an overview of the American religious landscape, including historical changes in religious belief and belonging and scholarly work on religion’s connection with national identity in the American context. We then examine recent research on the growing percentage of Americans who claim no religious identity, on atheist organization and identity-formation, and on attitudes toward atheists and other religious out-groups. Throughout the course, we engage with sociological debates about secularization in the late-modern context.

**Style:** 50% Lecture, 20% Discussion, 20% Small Group Activities, 10% Student Presentation.

**Grading:** 30% mid exam, 30% final exam, 20% in-class presentation, 20% class participation.

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**Soc 3090 Topics in Sociology: Global Institutions of Power**

3 credit(s), max credits 6;

**Instructor:** Goldman, Michael R

**Description:** This course introduces three of the world's most powerful global institutions -- the World Bank, International Monetary Fund, and World Trade Organization. Three dimensions will be emphasized: we will look behind their closed
doors to understand their daily practices; we will learn about the political, economic, and cultural terrain in which they operate; and we will observe them in key sites in the global South and North. Course themes include the business and expertise of development, poverty and wealth generation, the ideas of free market and trade, the rise of a transnational professional class and networks, and transnational social activism and networks.

**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:** Bruton, James Harrison

**Description:** This course will introduce students and focus on the three main components of the American Criminal Justice system: law enforcement, the criminal judicial process and correctional approaches in dealing with offenders. The course is designed to familiarize students with these broad topical areas and to explore the decision-making process and the equality of treatment that takes place within the American Criminal Justice system. The course meets the Liberal Education requirements of Civil Life and Ethics and of the Social Sciences. Courses with this designation are carefully designed to address the components, dynamics, and philosophical underpinnings of criminal justice, through critical framework of Liberal Education.

**Style:** 70% Lecture, 15% Film/Video, 10% Discussion, 5% Guest Speakers.

**Grading:** 25% mid exam, 50% final exam, 25% reflection paper. There will be 50 points on the mid-term, 100 points on the final exam and 50 points on the reflection papers for a total of 200 points.

**Exam Format:** Short answer and short essay.

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**Soc 3102 Introduction to Criminal Behavior and Social Control**
3 credit(s);

**Instructor:** Ferrales, Gabrielle

**Description:** This course will address the social and legal origins of crime and crime control. We will focus on general theories of deviance/crime and present an overview of forms of social control. We will critically examine criminological, sociological and legal theories that explain the causes of crime. This course covers diverse types of crime, including: street crime, violent crime, white-collar crime, occupational crime, war crimes and torture. In addition, we will examine the punishment of crime, including policing, prosecution, sentencing and mass incarceration. There will be a particular focus on how crime and forms of social control impact social inequality and divisions around race, class, and gender.

**Style:** 45% Lecture, 5% Film/Video, 45% Discussion, 5% Small Group Activities.

**Grading:** 35% mid exam, 35% final exam, 30% reports/papers.

**Exam Format:** Essay and short answer (1 mid-term, 1 final)

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**Soc 3201 Inequality: Introduction to Stratification**
3 credit(s);

**Instructor:** Bian, Yanjie

**Description:** This course examines the basic concepts and theories sociologists use to describe and explain social stratification and inequality. Our empirical attention will be given to the causes, dimensions, and consequences of inequality in America, as well as on cross-national patterns around the globe. The textbook for the class is "Social Stratification and Inequality: Class Conflict in Historical, Comparative, and Global Perspective" by Harold Kerbo. Lectures and quizzes will cover the contents of selected chapters of the text. In addition, each student will carry out a study project in which to conduct interviews with or observations on two families, and the student's term paper is to report and analyze the findings.
from this study about the relative stratification positions of these two families. Course grade is based on the quizzes (50%) and the term paper (50%). No final exam.

**Style:** 85% Lecture, 10% Discussion, 5% Student Presentation.

**Grading:** 40% reports/papers, 10% special projects, 50% quizzes. 10% "Special Projects" is for a study outline of 1-2 pages.

**Exam Format:** No exam. But each quiz is one page of 5 T/F or multiple-choice questions.

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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 Writing Intensive**
- **Instructor:** Pellow, David

**Description:** This course introduces students to the theoretical and historical foundations of race relations in the United States. In particular, we focus on the formation of racial and ethnic identities, on how these are produced through political struggle at the local, national, global scales, and how they are maintained and transformed over time. We pay close attention to the ways in which race and ethnicity intersect with gender, sexuality, class, citizenship, and nation in order to better understand how systems of power, privilege, and inequality are constructed, reinforced, and challenged. The role and impact of social movements in shaping these social categories will be at the center of the course focus. Students are expected to apply social scientific concepts and theories to the subject matter, drawing on frameworks from Sociology, History, American Studies, Ethnic Studies, and Law.

**Style:** 65% Lecture, 10% Film/Video, 15% Discussion, 5% Small Group Activities, 5% Guest Speakers. Service learning component is optional.

**Grading:** 30% mid exam, 30% final exam, 10% quizzes, 20% written homework, 10% class participation.

**Exam Format:** Both the midterm and final exams will be take home tests requiring the use of course readings, lectures, discussions, and films to answer questions.

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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 week 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 3322W Social Movements, Protests, and Change**

- **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: GLOS 3322W; Meets CLE req of Civic Life and Ethics; meets CLE req of Writing Intensive**
- **Instructor:** Aminzade, Ron R

**Description:** Focusing on the origins, dynamics, and consequences of social movements, this course explores debates about the dilemmas and challenges facing movement organizations, the relationship between social movements and political institutions, and the role of social movements in bringing about social and political change. Although the course is organized around general theoretical issues, we will draw on empirical case studies of a wide variety of social movements. Students will be asked, in their written work, to apply the concepts and theories in the readings to the local social movement organization they choose for their required community service learning project. This course will be web enhanced but the URL is not yet available.

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

**Grading:** 75% reports/papers, 25% class participation. Note: To receive a grade of B or better, students must submit the ten required weekly one page reaction papers, which will not be graded.

**Exam Format:** no exams

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**Soc 3451W Cities & Social Change**

- **3 credit(s); Meets CLE req of Writing Intensive**
- **Instructor:** Park, Lisa Sun-Hee

**Description:** The objective of this course is to develop a deeper understanding of the transformation of urban life. We will
apply a multidisciplinary approach in investigating the dramatic social, political/economic, and spatial changes that have occurred in U.S. cities. We will pay close attention to how these changes have structured institutions and ideologies of today's metropolis and resulted in differential experiences of belonging. We will conclude by analyzing the possibilities for social justice within the culture of a postmodern metropolis.

**Soc 3511 World Population Problems**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for 3511H 

**Instructor:** Meier, Ann  
**Description:** This course explores population dynamics in global perspective. Students will learn major population theories and measures. We will closely examine the ways in which people enter and leave populations -- by birth, death, or migration. We will explore societal differences in these phenomena and investigate their causes and consequences. In particular, we will explore differences in the population situations in highly developed and less developed nations, and differences between subgroups within societies. Within-country differences in population processes exist along gender, race, and social class lines. Key population policies will be discussed.

**Style:** 50% Lecture, 30% Discussion, 10% Guest Speakers.

**Grading:** 40% reports/papers, 10% special projects, 40% quizzes, 5% attendance. "special projects" are devising several questions for book authors with whom we will have in-person or web chats after we read their books.

**Exam Format:** no exams, only weekly reading quizzes and book critique papers.

**Soc 3511H Honors: World Population Problems**

A-F only, 3 credit(s); Credit will not be granted if credit has been received for 3511H 

**Instructor:** Meier, Ann  
**Description:** This course explores population dynamics in global perspective. Students will learn major population theories and measures. We will closely examine the ways in which people enter and leave populations -- by birth, death, or migration. We will explore societal differences in these phenomena and investigate their causes and consequences. In particular, we will explore differences in the population situations in highly developed and less developed nations, and differences between subgroups within societies. Within-country differences in population processes exist along gender, race, and social class lines. Key population policies will be discussed. Honors students are expected to demonstrate greater depth of discussion, depth and to a degree length of writing assignments, and leadership of the students.

**Style:** 50% Lecture, 30% Discussion, 10% Guest Speakers.

**Grading:** 50% reports/papers, 10% special projects, 35% quizzes, 5% attendance. "special projects" are devising several questions for book authors with whom we will have in-person or web chats after we read their books.

**Exam Format:** no exams, only weekly reading quizzes and book critique papers.

**Soc 3531 Health Policy in a Global Context**

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

**Instructor:** Sage PhD, Starr Kelly  
**Description:** Student may contact the instructor or department for information.

**Soc 3613V Honors: Stuffed and Starved: The Politics of Eating**

A-F only, 3 credit(s); 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:** Schurman, Rachel  
**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 this course will explore are the different cultural and social meanings attached to food; class and diet; food, culture and body image; the industrialization of agriculture; the global food economy; the debate over genetically modified food; and movements toward a more sustainable agriculture. The general objective of this course is to teach you how to view the world of food and agriculture from a sociological perspective. A more specific objective is to get you to think analytically about something that is so everyday?that most of us take it for granted: where our food comes from, why we eat the way (and what) we do, and the kind of social relationships involved in our encounters with food. Students can expect to read between 40-70 pages a week (of interesting reading!), produce one short paper and one longer (12-15 page) research paper on a course-related topic, and participate in several out-of-classroom exercises (which will include some write-up) during the course of the semester. The course is heavily discussion based, and active participation is required. 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.

**Soc 3613W Stuffed and Starved: The Politics of Eating**
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? Where is society headed in the future? The goals of the course are to deepen students' understanding of the significance of such questions and to provide a preliminary survey of theories that have tackled these questions from the late 19th century to the present. For present and future sociology majors, the course provides an indispensable background for subsequent work in the discipline. For all others, it provides an invitation to think about some of the most vital questions that confront us all as reflective and self-aware members of our communities and our world. The course design is premised on the idea that the best way to learn and understand social theory is by seeing its connection to contemporary issues and concerns. Therefore, the primary theory readings in this course are paired with writings that illustrate the relevance of these theories to contemporary concerns or that directly apply the theories to current issues and questions.
Style: 60% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities.
Grading: 35% mid exam, 35% final exam, 30% quizzes.
Exam Format: multiple choice, short answer and essay

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: Mortimer,Jeylan T
**Description:** Principles of Social Psychology Social psychology is at the intersection of "macro" and "micro" sociology. This class will illuminate the dynamic linkages among social organization, interaction processes, attitudes, and the self. Students will learn principles of social psychology drawn from multiple theoretical perspectives, including symbolic interactionism, expectation states theory, social structure and personality, and the life course. The course will cover a broad range of topics as well as the diverse methods that social psychologists use to study them (for example, experiments, surveys, ethnographic observation). The class will show the relevance of the classic literature of social psychology to contemporary social problems and issues, including rapid social and technological change, inequality (based on gender, race/ethnicity, occupation, wealth), discrimination, torture, and terrorism.

**Style:** 50% Lecture, 5% Film/Video, 10% Discussion, 35% Small Group Activities.

**Grading:** 40% mid exam, 50% final exam, 10% in-class presentation.

**Exam Format:** Short essay.

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**Soc 3801 Sociological Research Methods**

4 credit(s);

**Instructor:** Liebler, Carolyn

**Description:** This course focuses on the effective critical evaluation of sociological evidence. After introducing basic principles of sociological research, we will carefully read and analyze significant studies which exemplify each of four types of sociological research methods: field observations, historical archives, surveys, and experiments. No mathematical or statistical background is required.

**Style:** 60% Lecture, 5% Film/Video, 5% Discussion, 20% Laboratory, 5% Small Group Activities, 5% Guest Speakers.

**Grading:** 20% mid exam, 20% final exam, 30% reports/papers, 10% written homework, 10% class participation, 10% laboratory evaluation.

**Exam Format:** short answer and brief essay

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**Soc 3801 Sociological Research Methods**

4 credit(s);

**Instructor:** DeWaard, Jack

**Description:** This course is an introductory "how to" 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.

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

**Exam Format:** Quiz Format: multiple choice, Exam Format: short answer, essay

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**Soc 3811 Basic Social Statistics**

4 credit(s); 1001 recommended, Undergraduates with strong math background who have completed Soc 3801 are encouraged to register for 5811 in lieu of 3811. Currently, 5811 only offered in fall. Credit will not be granted if credit has been received for 5811. Soc majors/minors must register A-F.Credit will not be granted if credit has been received for: SOC 5811;Meets CLE req of Mathematical Thinking

**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 calculator for assignments and exams.

**Style:** 65% Lecture, 35% Laboratory.

**Grading:** 70% mid exam, 30% problem solving.

**Exam Format:** multiple choice, computational problems

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**Soc 4090 Topics in Sociology: Never Again! Memory and Politics after Genocide**

3 credit(s), max credits 6;

**Instructor:** Baer, Alejandro

**Description:** This course focuses on the social repercussions and political consequences of large-scale political violence, such as genocide, crimes against humanity and war crimes. How do individuals, communities and societies come to terms with these atrocities? How do successor regimes balance the demands for justice with the need for peace and reconciliation? How is public memory of the atrocities constructed? Section I provides an overview of the basic concepts and themes of this class: defining mass violence, collective memory and forgetting in post-atrocity contexts, and transitional
justice. In Section II we will look at memory of the Holocaust among descendants of victims and descendants of perpetrators and its impact on the way other communities shape and represent their memories of mass violence and victimhood, i.e. their specific demands, symbolic politics and judicial strategies. In Section III we will address cases from around the globe and different historical settings, including the legacies of State terror in Latin America, the aftermath of Stalinist mass violence in Eastern Europe and American Indian struggles for memory and justice. This course will be conducted as a combined lecture and discussion course. This format will be supplemented by occasional in-class group activities.

**Style:** 50% Lecture, 15% Film/Video, 20% Discussion, 15% Small Group Activities, small group work

**Grading:** 25% mid exam, 30% final exam, 30% reports/papers, 10% attendance, 5% in-class presentation.

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**Soc 4101V Honors: Sociology of Law**

A-F only, 3 credit(s); [1001, 3101, 3102] or 3701 recommended, soc majors/minors must register A-F

**Credit will not be granted if credit has been received for:** SOC 4101W; Meets CLE req of Writing Intensive

**Instructor:** Ferrales, Gabrielle

**Description:** This course will consider the relationship between law and society, analyzing law as an expression of cultural values, a reflection of social and political structure, and an instrument of social control and social change. Emphasizing a comparative perspective, we begin by discussing theories about law and legal institutions. We then turn our attention to the legal process and legal actors, focusing on the impact of law, courts, and lawyers on the rights of individuals. Throughout the course, we will consider the role of law in reinforcing and changing class, gender, and race inequalities. Although this course focuses on the U.S. legal system, we will explore issues of the relationship between U.S. law and global law and concepts of justice. This course uses an array of reading materials including: theoretical works, empirical studies, and U.S. Supreme Court cases. 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:** 45% Lecture, 5% Film/Video, 45% Discussion, 5% Small Group Activities.

**Grading:** 20% mid exam, 20% final exam, 50% reports/papers, 10% class participation.

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**Soc 4104 Crime and Human Rights**

3 credit(s); 1001, at least one 3xxx SOC or GLOS course recommended, soc majors/minors must register A-F

**Credit will not be granted if credit has been received for:** GLOS 4104;

**Instructor:** Savelsberg, Joachim J

**Description:** This course addresses serious violations of humanitarian and human rights law, efforts to criminalize those violations (laws and institutions), and consequences of these efforts. Examples are crimes against humanity, war crimes, and genocide. Special attention will be paid to the impact interventions have on memories of atrocities as such memories are likely to affect the future of cycles of violence. Section I provides an overview of the basic themes of this class and their interconnection: atrocities, legal and other institutional responses, and the ways responses mediate memory. Section II addresses a series of cases in which responses to past atrocities included criminal prosecution and trials: the Holocaust, the Balkan wars, and the My Lai massacre during the Vietnam War. A special focus will be on the violence in the Darfur region of Sudan. Section III will examine cases in which a major response to atrocities was truth commissions, at times combined with trials and compensation programs. Special cases include South Africa, Argentina, and post-Communist Eastern Europe. Section IV addresses the consequences of interventions and memories for ending cycles of violence.

**Style:** 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Student Presentation.

**Grading:** 50% mid exam, 35% final exam, 15% special projects.

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**Soc 4104H Honors: Crime & Human Rights**

A-F only, 3 credit(s); 1001, at least one 3xxx SOC or GLOS course recommended

**Credit will not be granted if credit has been received for:** SOC 4104;

**Instructor:** Savelsberg, Joachim J

**Description:** This course addresses serious violations of humanitarian and human rights law, efforts to criminalize those
violations (laws and institutions), and consequences of these efforts. Examples are crimes against humanity, war crimes, and genocide. Special attention will be paid to the impact interventions have on memories of atrocities as such memories are likely to affect the future cycles of violence. Section I provides an overview of the basic themes of this class and their interconnection: atrocities, legal and other institutional responses, and the ways responses mediate memory. Section II addresses a series of cases in which responses to past atrocities included criminal prosecution and trials: the Holocaust, the Balkan wars, and the My Lai massacre during the Vietnam War. A special focus will be on the violence in the Darfur region of Sudan. Section III will examine cases in which a major response to atrocities was truth commissions, at times combined with trials and compensation programs. Special cases include South Africa, Argentina, and post-Communist Eastern Europe. Section IV addresses the consequences of interventions and memories for ending cycles of violence. 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:** 65% Lecture, 10% Film/Video, 10% Discussion, 10% Small Group Activities, 5% Student Presentation.

**Grading:** 50% mid exam, 35% final exam, 15% special projects.

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**Soc 4105 Sociology of Punishment and Corrections**

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

**Instructor:** Page, Joshua A

**Description:** This course is an in-depth sociological analysis of core penal institutions in the United States. We examine the origins, functions, and effects of incarceration from the 19th century to the present; the culture and social relations in male and female prisons; the prisoner rights movement of the 1960s and 1970s; and the causes and consequences of America's extraordinary prison boom. Along with imprisonment, we study the birth and transformation of "community corrections" (e.g., parole and probation) and the death penalty. This class combines readings, lectures/discussions, and films.

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

**Exam Format:** One in-class and two take-home exams.

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**Soc 4111 Deviant Behavior**

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

**Instructor:** Uggen, Christopher

**Description:** This course asks why and how certain attributes and behaviors are defined as deviant, the consequences of deviant labels, and how norms, values, and rules are made and enforced. There are four units. We first take up basic concepts that cut across theories and research on deviance, including social control, subcultures, and deviant careers. The second unit is devoted to theories of deviant behavior and societal reaction. We then discuss methodology and how the "social facts" of deviance are determined and disseminated. Case studies in topical areas are the fourth focus, addressing crime, organizational and occupational deviance, substance use, heteronormativity and sexuality, suicide, disability, and mental illness. Course objectives include the following: (1) To understand how deviance is defined and produced; (2) To gain a working knowledge of the key sociological explanations of deviance; (3) To critically apply these ideas to selected case studies; and, (4) To critique and evaluate institutional responses to deviance and control. There is one basic text for the course and supplemental readings available online in Adobe pdf format. The Adler and Adler reader is a collection of excerpts from classic and contemporary writings on deviance, with a much heavier emphasis on the social construction of deviance. If you purchase an earlier edition of the text, please understand that you will be responsible for the material in the most recent editions. Texts are available at the bookstore or online from retailers such as amazon.com and barnesandnoble.com. Most of the supplementary readings will come from my local work with Minnesota graduate and undergraduate students on topics such as disenfranchisement, sexual harassment, and workplace deviance. This is more difficult material, but I will explain the research during lectures.

**Style:** 50% Lecture, 10% Film/Video, 25% Discussion, 10% Small Group Activities, 5% Service Learning. media and in-class exercises.

**Grading:** 25% mid exam, 30% final exam, 25% reports/papers, 10% special projects, 10% class participation.

**Exam Format:** Mixed -- typically 70% essay

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**Soc 4125 Policing America**

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

**Instructor:** Phelps, Michelle Suzanne

**Description:** This course is an in-depth sociological analysis of the origins, composition, and effects of policing in contemporary U.S. society. Throughout the course, we focus on using a social science lens to understand what policing is and how it influences social life. We will pay particular attention to the ways in which racial inequalities are reflected in and reshaped by policing practices. The course material is divided into three units. In the first, we cover the early history of formal policing in the U.S. and contemporary developments, including broken windows policing and the war on drugs. We will read two ethnographies of policing in an urban locale and a rural town to better understand the lived experiences of the police and the policed. We then turn to the police as an organization, looking at the ways in which race, gender, and other social characteristics shape police work. In the third unit, we turn to how the logic of policing filters through and beyond the state in schools, welfare offices, the war on terror, and mass technological surveillance. Throughout the course, students will also use ethnographic tools to study policing themselves in local Minneapolis neighborhoods.

**Style:** 60% Lecture, 10% Film/Video, 20% Discussion, 10% Small Group Activities.
**Soc 4142 Juvenile Law**

3 credit(s);
Instructor: Malmquist, Carl P

**Description:** An overall focus on issues involving juveniles in our society and how various issues are dealt with in the system of juvenile justice. Topics include: allocation of power among juveniles, families, and the state; problems that arise for juveniles with the school setting and within families; abuse and child neglect; children's rights; and the juvenile court and its origins up to more current problems. Various types of cases and problems that arise in the juvenile justice system will be considered.

**Style:** 60% Lecture, 30% Discussion, videos

**Grading:** 95% other evaluation, exams, 5% class participation

**Exam Format:** multiple choice

**Soc 4161 Criminal Law in American Society**

3 credit(s);
Instructor: Samaha, Joel B

**Description:** What's criminal law and what's it good for? Should we punish people only for what they do? or for what they might do? or even sometimes for who they are? What are the justifications and excuses for committing crimes? Topics: elements of crime that the prosecution has to prove beyond a reasonable doubt; accomplices; criminal attempts; defenses of justification (self-defense, defense of home) and defenses of excuse (insanity, age); criminal homicide; criminal sexual conduct. Read and discuss actual cases edited for non lawyers. Intensive class discussion. For upper division undergraduates, all majors.

**Style:** 15% Lecture, 85% Discussion.

**Grading:** 10% class participation, 90% other evaluation. weekly exams covering reading and discussion

**Exam Format:** 40%, short answer quiz on each week's assigned reading (no notes or books allowed); 20%, analysis of week's assigned cases (take home); 40%, reaction essay based on the day's discussion topic (open book and notes)

**Soc 4190 Topics in Sociology With Law, Criminology, and Deviance Emphasis: Crime on TV**

3 credit(s), max credits 6;
Instructor: Page, Joshua A

**Description:** This new course uses television shows to explore sociological perspectives on crime and punishment. Students will read scholarly articles and analyze TV shows, including (but not limited to) The Walking Dead, The Wire, Orange is the Black, and Rectify. Classes will be a mix of lecture and group discussions. Grades will be based on participation, brief memos, quizzes, and a final exam.

**Style:** 45% Lecture, 35% Discussion, 15% Small Group Activities, 5% Guest Speakers.

**Grading:** 25% mid exam, 45% reports/papers, 25% quizzes, 5% class participation.

**Exam Format:** The final exam will be "take home."

**Soc 4305 Environment & Society: An Enduring Conflict**

A-F only, 3 credit(s); 1001 or environmental course recommended, [soc majors/minors must register A-F] Credit will not be granted if credit has been received for: GLOS 4305; Meets CLE req of Environment

Instructor: Pellow, David

**Description:** This course introduces students to the theoretical and historical foundations of environmental sociology and environmental social sciences more broadly. We will examine and interrogate the social scientific and scientific evidence concerning these phenomena and the efforts by community residents, activists, workers, and governments to combat it. We will consider the ways in which human and nonhuman forces interact, collide, collaborate and are indeed inseparable. Students will be expected to master social scientific theories and concepts related to the subject matter. In particular, we pay close attention to the ways in which concepts like nature, environment, economy, society, humanity, culture, and the state intersect and shape one another in order to better understand how social and natural systems are constructed, reinforced, and challenged. Questions we will pursue include: how do humans and nonhuman forces work together and why are they so often in conflict? What is the relationship between social hierarchies within human society and myriad impacts on ecosystems? How do we as individuals and groups contribute to ecological harm and how might we be a part of solutions to socioenvironmental crises? Furthermore, students will be exposed to key concepts, theories, and perspectives from outside the social sciences, including climate science, entomology, geochemistry, biology, plant and animal science, earth science and geology, physics, history, public health, genomics, and epidemiology. Studying the relationship between human society and the nonhuman environment is fundamentally an ethical issue and a matter of shared responsibility because it reveals the ways that our everyday activities and the public policies our elected officials enact have real consequences for the health of humans and the ecosystems upon which we depend. We will consider and debate evidence and perspectives from the social sciences and sciences on this matter with an eye toward inciting the importance of students acting as historical agents of change in the quest for improvements in knowledge, scholarship, and action toward sustainability. In that regard, the class will place particular emphasis on connecting knowledge and practice by requiring students to 1) complete writing assignments and in-class exercises that demonstrate an understanding of the
Soc 4703 Contemporary American Culture
3 credit(s);Meets CLE req of Civic Life and Ethics
Instructor: Hull,Kathleen E
Description: Is American culture becoming too individualistic? Are the values of community, family and social connection in decline? How have newer technologies, such as television and computers, affected cultural life? Has the pace of American culture accelerated, and if so has the speed-up gone too far? Is our culture obsessed with fame and celebrity, causing us to perceive all of life through the lens of entertainment? What happens when cultures come into conflict? Is globalization leading to a homogeneous "world culture"? These are the kinds of questions we will tackle in this course. The course is divided into three parts. Part 1: What exactly is "culture" and why is it important to sociology? We will consider how culture is defined in the social sciences and some of the leading approaches to studying culture in sociology. Part 2: We will examine in detail one model of how cultural change occurs. Through case studies of movements such as the Civil Rights Movement of the 1960s, we will assess patterns of power, political interaction, and conflict among various social groups, with special attention to how political and social values change over time. Part 3: We will review and critically assess several prominent theories about the causes and consequences of cultural change in the contemporary American
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 ones 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.

Soc 4966W Major-Project Seminar
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Stepnitz, Rebecca
Description: This course serves as a capstone to your studies in sociology. It is designed to: a) provide you with an opportunity to reflect on what you have learned as a sociology major; b) think about how the knowledge, skills, and insights of sociology can be used and applied in your lives and careers outside of the University, and c) use that knowledge to write a senior project paper (usually based on community service learning). The focus is on how sociological knowledge, research, and thought help to promote critical thinking, effective communication, an appreciation of diversity, and social responsibility in public life. The main goal of the course is to guide you through the process of writing your senior project paper, a graduation requirement for all Sociology majors. Course materials encourage you to reflect on the role of sociological knowledge in the contemporary world and to connect your sociological knowledge to a community-based senior research project. Classes will include a combination of lectures, active learning exercises, writing exercises to help you prepare your main paper, and discussions of the required readings.
Style: 20% Lecture, 20% Discussion, 20% Small Group Activities, 15% Guest Speakers, 25% Service Learning.
Grading: 50% reports/papers, 30% written homework, 20% class participation.

Soc 4977V Senior Honors Proseminar I
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Uggen, Christopher
Description: The Senior Honors Proseminar I is the first of two courses designed for honors students majoring in sociology. Students in Sociology 4977 will finalize their research problems, develop appropriate methodologies and research instruments, secure human subjects approval, collect original data or identify secondary sources, and begin data analysis. The course will operate as a seminar, with students leading discussions and critiquing their peers. In the first (Fall) Senior Proseminar, we emphasize conceptualization and measurement. You will narrow your topic to a thesis-sized research question, secure the data and permissions necessary to proceed with your work, identify your thesis committee, and take your first cut at the analysis. In the second (Spring) Senior Proseminar, you will focus on writing and rewriting your thesis. You will unify its component parts into a coherent whole, defend the thesis before your committee, and consider outlets for publication or dissemination of your work.
Style: 20% Lecture, 5% Film/Video, 40% Discussion, 5% Laboratory, 10% Student Presentation, 5% Field Trips, 5% Guest Speakers, 5% Web Based. We'll set up individual meetings to talk about your work.
Grading: 50% reports/papers, 20% written homework, 10% in-class presentation, 10% class participation, 10% problem solving. Project proposal (10%), theory and literature (25%), human subjects (10%), data, methods, and indicators section (25%), participation (10%), and short assignments and in-class exercises (20%)
Exam Format: None.

Soc 5455 Sociology of Education
3 credit(s); 1001 or equiv or instr consent; soc majors/minors must register A-F Credit will not be granted if credit
has been received for: OLPD 5041;
Instructor: Seashore,Karen Rose
Description: Structures and processes within educational institutions; linkages between educational organizations and their social contexts, particularly related to educational change. Focus on issues of race, class and equity, both within the U.S. and internationally.
Style: 40% Lecture, 40% Discussion. Student presentations, role plays, movie clips, etc.
Grading: 50% reports/papers, 10% in-class presentation, 30% class participation, 10% other evaluation. on-line discussions

Soc 5811 Intermediate Social Statistics
4 credit(s);Primarily for 1st-yr soc grad students, [undergraduates with strong math background who have completed 3801 are encouraged to register for 5811 in lieu of 3811 or instr consent ], soc majors/minors must register A-F Credit will not be granted if credit has been received for: SOC 3811;
Instructor: Knoke,David Harmon
Description: Measurement, theory of probability, and bivariate statistics. Multiple regression analyses of sociological data.
Style: 67% Lecture, 33% Laboratory.
Grading: 100% reports/papers. Three papers involve statistical analyses of social datasets.

Soc 8001 Sociology as a Profession
S-N only, 1 credit(s), max credits 2;
Instructor: Kelly,Erin L
Description: This course provides a forum for first-year Ph.D. students in sociology to learn about the department and navigate the graduate program successfully and comfortably. We also work together to identify resources within and beyond the University for expanding our skills and networks. Students are encouraged to develop a clearer vision of the professional life they wish to pursue. There are very limited readings and few formal assignments, but students are expected to actively participate in class discussions, the department?s workshop series, and other seminars or training activities.

Soc 8090 Topics in Sociology: Great Books in Sociology
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Hartmann PhD,Douglas
Description: Seminar participants will read and discuss great books in the sociological canon. The course is intended to help students think about the construction, design, and execution of manuscript-length research projects (such as dissertations) as well as to cultivate a deeper understanding of research and thought in the discipline. Topics will include: the rhetoric and conventions of sociological writing; audience, aims, and research questions; the use of data, methods, and theory; and, contributions to scholarship and knowledge. One course project option will be to do a close reading and broader reflective analysis of a book project produced by a faculty member here at the University of Minnesota.
Style: 20% Lecture, 60% Discussion, 20% Student Presentation. the course will be a seminar
Grading: 40% special projects, 20% reflection paper, 20% in-class presentation, 20% class participation.
Exam Format: none

Soc 8090 Topics in Sociology: Law & Society Review: Journal Editing Seminar
1.5 credit(s), max credits 12, 4 completions allowed;
Instructor: Savelsberg,Joachim J
Description: This course is co-taught be 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.

Soc 8090 Topics in Sociology: Cross-Disciplinary Perspectives on Human Rights
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Boyle,Elizabeth Heger
Description: This seminar will approach human rights issues from a variety of theoretical perspectives. The course will emphasize active engagement with the topic of human rights through a combination of readings, group discussions, site
visits, and interactions with invited guests. Key topics will include: the historical origins of human rights; debates over human rights; theories on causes of human rights violations; and personal activist engagement to improve human rights situations. Students will leave the class with a solid understanding of the social practices and institutional arrangements that underpin human rights at the local, national, and international level.

Soc 8090 Topics in Sociology: Sociology of Education: Journal Editing Seminar
1.5 credit(s), max credits 12, 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.

Soc 8190 Topics in Law, Crime, and Deviance
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 8701 Sociological Theory
A-F only, 4 credit(s);
Instructor: Gowan, Teresa
Description: This course is designed to give students a foundation in classical social theory up to 1960, with a strong emphasis on the work of De Beauvoir, Du Bois, Fanon, Gramsci, Marx, and Max Weber. These authors’ analyses of power and social control provide our infrastructure: from the brutality of primitive accumulation and feudalism to the architecture of empire and racial domination, urbanization, industrial capitalism and bureaucracy. Our central themes will be the changing structural and cultural formations of class, status, race, and patriarchy, in the context of specific configurations of capitalism, modernity, and empire. This exploration of domination and conflict will be set in tension with a counterpoint of Durkheim, Mauss, and Douglas, bringing alive the alchemy of social connection, duty and desire through gift-giving and boundary-keeping, ritual and religion. Without (much!) skipping ahead, we will prefigure the focus of contemporary theory by paying close attention to the blurring of objectification into subjectification, and in general the complex interplay between material and symbolic forms of domination.

Soc 8721 Theories of Social Psychology
3 credit(s);
Instructor: Mortimer, Jeylan T
Description: Social psychology is basic to an understanding of social life. It includes social phenomena at both the macro and micro-levels, and the connections between them. Social psychology is central to an understanding of the interrelations of structure and agency: individual-level perceptions, cognitions, goals, and strategies, as they affect, and are influenced by, diverse social contexts. This seminar starts with a consideration of ?personal structure,? emphasizing the cultural variability of self-conceptions and identities, cognitive processes, emotion and motivation, as well as the biosocial bases of action. Individual-level ?building blocks? of social psychological theories include attitudes, values, ideologies, identities, and emotions. Prominent theoretical perspectives in social psychology: symbolic interactionism, exchange theory, and structural social psychology (?social structure and personality?) illuminate the content of many specialty fields in sociology. This seminar examines interpersonal relations, networks, small group dynamics, and a wide range of social psychological phenomena linked to inequality (e.g., the effects of class, minority status, and gender on disparities in self-concept, identity, and health; the development of status hierarchies in small group interaction; and intergroup relations, prejudice, and discrimination). Social psychological perspectives on deviance, work, social mobility, the life course, and social movements are also examined.
Style: 33% Lecture, 46% Discussion, 20% Student Presentation.
Grading: 30% mid exam, 40% final exam, 15% in-class presentation, 15% class participation.

Soc 8790 Advanced Topics in Sociological Theory: Contemporary Social Theory
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Goldman, Michael R  
Description: In this graduate seminar, we will read influential mid- to late-20th century social theorists (e.g., Gramsci, Foucault, Lefebvre, Harvey), and then study how they are interpreted/transformed by thinkers in Latin America, Africa, Asia, and in minority communities in the U.S. The goal is to appreciate intellectual knowledge production through tensions between the center (i.e., Europe, U.S.) and periphery, rather than reading each in isolation. Themes include: race, class, gender, power/knowledge, nation, hegemony, desire, urbanization, political economy.

Soc 8890 Advanced Topics in Research Methods: Qualitative Research Methods: Indepth Interviewing  
3 credit(s), max credits 6;  
Instructor: Schurman, Rachel  
Description: Arlie Hochschild, Lillian Rubin, and Michele Lamont have all given us rich sociological insights into the hearts, minds and lives of US workers on the basis of in-depth interviews. Other skillful interviewers have opened up other worlds to the sociological imagination and taught us much about the way people think, feel, and make sense of the world as well as of their own identities. This course explores in-depth interviewing as a qualitative research method, teaching students how to conduct interviews; transcribe, code, and analyze interview data; and write up interview-based research. We will also consider a range of epistemological, practical, and ethical issues related to interviewing as a research method, reading materials drawn from a range of substantive sociological subfields as well as from geography. This course is best suited to graduate students who have an interview-based project in mind and want to acquire the skills for carrying out their research; and/or students who are considering using interviews in their dissertation research and want to try their hand at interviewing before making a decision. Because this is a hands-on, fieldwork-based course, no auditors will be permitted.  
Style: 20% Lecture, 30% Discussion, 15% Small Group Activities, 25% Student Presentation, 10% Guest Speakers.  
Students will need to have a research project and plan within the first two weeks of the course. This course is time intensive.  
Grading: See syllabus for grading information.

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.
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: Pribyl, Douglas Wayne
Description: Student may contact the instructor or department for information.

Soil 2601 The Social Life of Soil
A-F only, 3 credit(s); Meets CLE req of Environment
Instructor: Ballen, Karen G
Description: This course will introduce basic soil biology concepts, including soil organisms and the roles they play before focusing on interactions between plant root systems and soil microorganisms. Finally, we will discuss various management practices that build and sustain a rich soil ecosystem. The course will be a large enrollment, interactive online class designed to appeal to students from a variety of majors. This course satisfies the Environment Theme.
Style: 100% online
Grading: 15% reports/papers, 30% special projects, 35% quizzes, 20% class participation.

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 5232 Vadose Zone Hydrology**
- 3 credit(s);
- Instructor: Gupta, Satish C  
Description: This course is intended for undergraduates and graduate students in Soil, Water, & Climate, Water Resources, Institute of Technology, Environmental Sciences, and Natural Resources. The course covers soil physical properties and processes that govern the transport of mass and energy in soils. Major emphasis is on water and solute transport through the vadose zone and their impact on subsurface hydrology and water quality. Specific topics include energy state of soil water, soil water retention characteristics, saturated and unsaturated hydraulic conductivities, Poiseuille and Darcy laws, law of mass conservation, water flow through uniform and layered soils, water infiltration equations, mechanisms of contaminant transport, preferential flow, contaminant adsorption and decay, transport of volatile organic compound, soil thermal properties, steady and non-steady state heat flow, and convective and diffusive gas fluxes. The lectures are supplemented with hands on laboratory exercises on methods of measuring hydraulic, thermal, and gas properties of soils, and methods of characterizing water, contaminants, heat, and gas fluxes in soils. We also have one to two guest lectures from scientists working in the Environmental Consulting Companies and State Agencies.  
Style: 70% Lecture, 30% Laboratory.  
Grading: 30% mid exam, 25% final exam, 25% reports/papers, 20% problem solving.  
Exam Format: multiple choice and identification

**Soil 5555 Wetland Soils**
- A-F only, 3 credit(s); 1125 or 2125 or equiv or instr consent; Concurrent registration is required (or allowed) in 4511 recommended  
Credit will not be granted if credit has been received for: ESPM 5555;  
Instructor: Wheeler, Daniel B  
Description: Student may contact the instructor or department for information.

**Soil 5611 Soil Biology and Fertility**
- 3 credit(s);
- Instructor: Gutknecht, Jessica Lucille Mentzer  
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.

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**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**
Span 1001 Beginning Spanish
5 credit(s);
Instructor: STAFF
Description: This course is the first half of a year-long course designed for true beginners: students who have not taken Spanish before. It is open to students who have studied less than two years of high school Spanish and students who have been away from the study of Spanish for five years or more. 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 takes a task-based, content-based, communicative approach to language learning and teaching. The course is taught mostly in Spanish. It focuses on the students? development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the Spanish-speaking world. The textbook, "Gente, tercera edicion? is accompanied by MySpanishLab (an online ?workbook?) and two video programs: Gente en Accion and Vistas Culturales. Most of class time is spent working in pairs and small groups on a variety of activities. Since the majority of class time is devoted to speaking and listening in Spanish, class attendance is critical.
Style: 25% Lecture, 10% Discussion, 65% Small Group Activities. Small group activities = Partner and small-group work
Grading: 30% Homework, 10% Compositions, 30% Exams and Quizzes, 10% Partnered Exchanges, 5% Tarea Participation, 15% Final Exam
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. 2 partnered exchanges

Span 1003 Intermediate Spanish
5 credit(s);[1002 or 1022] or EPT placement
Credit will not be granted if credit has been received for: MADR 1003;
Instructor: STAFF
Description: This course is the second half of a year-long course designed for true beginners: students who have not taken Spanish before. It is open to students who have studied less than two years of high school Spanish and students who have been away from the study of Spanish for five years or more. 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 takes a task-based, content-based, communicative approach to language learning and teaching. The course is taught mostly in Spanish. It focuses on the students? development of interpersonal speaking and listening skills, interpretive reading and listening skills, and presentational speaking and writing skills while working on an introduction to the cultures of the Spanish-speaking world. The textbook, "Gente, tercera edicion? is accompanied by MySpanishLab (an online ?workbook?) and two video programs: Gente en Accion and Vistas Culturales. Most of class time is spent working in pairs and small groups on a variety of activities. Since the majority of class time is devoted to speaking and listening in Spanish, class attendance is critical.
Style: 25% Lecture, 10% Discussion, 65% Small Group Activities. Small group activities = Partner and small-group work
Grading: 30% Homework, 10% Compositions, 30% Exams and Quizzes, 10% Partnered Exchanges, 5% Tarea Participation, 15% Final Exam
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. 2 partnered exchanges

Span 1003 Intermediate Spanish
5 credit(s);[1002 or 1022] or EPT placement
Credit will not be granted if credit has been received for: MADR 1003;
Instructor: Carlson Lombardi,Angela
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 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. Speaking/comprehension. Developing reading/writing skills based on materials from Spain/Spanish America. Grammar review. Compositions, oral presentations.
Style: Online
Grading: See attached syllabus
Exam Format: Supervised, in-person exams

Span 1003 Intermediate Spanish
5 credit(s);[1002 or 1022] or EPT placementCredit will not be granted if credit has been received for: MADR 1003;
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 policies, including fee and financial aid information. 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. Speaking/comprehension. Developing
Style: Online
Grading: 4% class participation. See attached syllabus
Exam Format: Supervised, in-person exams

Span 1003 Intermediate Spanish
5 credit(s);[1002 or 1022] or EPT placementCredit will not be granted if credit has been received for: MADR 1003;
Instructor: Wiesinger,Andrew David
Description: Student may contact the instructor or department for information.

Span 1004 Intermediate Spanish
5 credit(s);1003 or EPT placementCredit 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 001-016 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. 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 placementCredit will not be granted if credit has been received for: SPAN 1014;
Instructor: Mack PhD,Sara
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
Grading: See attached syllabus
Exam Format: Supervised, in-person exams

Span 1004 Intermediate Spanish
5 credit(s);1003 or EPT placementCredit 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
Style: Online
Grading: See attached syllabus
**Exam Format:** Supervised, in-person exams

**Span 1004 Intermediate Spanish**

5 credit(s); 1003 or EPT placement

**Credit will not be granted if credit has been received for:** SPAN 1014;

**Instructor:** Sanchez-Vargas, Adriana Ximena

**Description:** This is a fully online section offered through Online and Distance Learning (ODL), College of Continuing Education. You work independently, not as part of a student group. Visit "Class URL" for ODL policies, including fee and financial aid restrictions. Speaking/comprehension. Developing reading/writing skills based on materials from Spain/Spanish America. Grammar review. Compositions, oral presentations.

**Style:** Online with handwritten exams and Language Proficiency Exams

**Grading:** 4% class participation. See attached syllabus

**Exam Format:** Supervised, in-person exams.

**Span 1022 Alternate Second-Semester Spanish**

5 credit(s); Placement above 1001

**Credit will not be granted if credit has been received for:** SPAN 4002;

**Instructor:** STAFF

**Description:** This class is a first year Spanish course developed for students with previous language experience. The instruction and context are delivered by a combination of in-class meetings and a wide range of online activities. The different online components were designed to help you become a more successful language learner by giving you the opportunity to explore different learning modes independently and to provide more exposure to the Spanish language. You will have the opportunity to experience different accents and regional variations, not just your instructor’s, as well as a wealth of other authentic materials that would not be readily accessible in a regular classroom. For that reason the course requires a considerable amount of independent work to be completed online outside of the classroom contact hours. The regular class typically meets four days a week and the Technology-enhanced sections typically meet three days a week.

All sections meet every day the first week of instruction

**NOTE:** Students are not to schedule other classes or work on the days that the classes do not meet because some weeks classes will meet all five days and the instructors expect those 50-minute sections to be available for Spanish on short notice. The web activities are to be done outside of the classroom.

**Style:** 5% Lecture, 10% Discussion, 10% Laboratory, group work, reading and related activities

**Grading:** 20% final exam, 10% class participation, 10% laboratory evaluation, 25% other evaluation. unit exams, 15% oral interview type evaluations, 10% written compositions and journals, 10% listening and workbook exercises

**Exam Format:** All quizzes and tests evaluate listening, reading, vocabulary, grammar & writing. A minimum of multiple choice & true-false items; encourage the use of natural language by using short answers and essays. Two oral interviews.

**Span 1044 Intermediate Medical Spanish**

5 credit(s); 1003 or equiv

**Credit will not be granted if credit has been received for:** SPAN 1004;

**Instructor:** STAFF

**Description:** Course designed to help health care professionals and/or students pursuing health care field communicate with patients who speak Spanish. Basic Medical vocabulary, questions and answers in common medical situations, vocabulary and phrases to conduct patient interviews and medical history, vocabulary and conversation to conduct physical exams; understanding the Latin American view of health and health care. In terms of the grammatical aspects, the course covers same areas as Spanish 1004; therefore, students planning on taking Spanish 3015 will be prepared to do so. Besides in class activities, and for a better understanding of cultural aspects, students will perform individual work on WebCT and CD-ROM which concentrate on watching and listening, reading and writing about interviews of health care providers who work with Spanish speaking community, and interactions in the target language between doctors and patients.

* Evaluation standards: Students will be evaluated on class participation, discussion of course content, exploration of cultural component, therefore class attendance is critical. Evaluation of communicative speaking, writing, listening and reading is done through exams, composition writing and presentation. Application of Learning Technologies: each week online discussion of questions based on readings. The discussion requires thought about how a theme is related to aspects of interaction with the Chicano/latino population.

**Style:** 10% Lecture, 60% Discussion. language lab, listening, writing testing for comprehension and vocabulary and peer editing

**Grading:** 15% reports/papers, 50% quizzes, 10% in-class presentation, 15% class participation, 10% other evaluation. round table discussion

**Exam Format:** Exams evaluate listening, reading, vocabulary & grammar, writing & culture. A minimum of multiple choice and true/false items; encourage use of natural language by using short answers, short /long reports

**Span 1520 Review of Foundations in Spanish**

A-F only, 1 credit(s);

**Instructor:** Punti, Gemma

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

**Span 1521 Spanish I**

A-F only, 3 credit(s);
Span 1522 Spanish II
A-F only, 3 credit(s);
Instructor: Punti, Gemma
Description: Student may contact the instructor or department for information.

Span 1524 Conversational Spanish
A-F only, 1 credit(s);
Instructor: Punti, Gemma
Description: Student may contact the instructor or department for information.

Span 1904 Topics: Freshman Seminar: Arab Spain: Then and Now
A-F only, 3 credit(s); Meets CLE req of Global Perspectives
Instructor: Hamilton, Michelle Marie
Description: TOPIC: Arab Spain: Then and Now Prof. Michelle M Hamilton Fall 2014 -- While today Spain is considered a part of Western Europe, this has not always been the case. Spain was under Muslim rule for some 700 years?the only European country whose native language was Arabic and that shared more in common with the Muslim East than with the Christian West. The history of Muslim rule in Spain continues to affect the way Spaniards (and other Europeans) think of themselves, Arabs and the co-called East. The centuries of Muslim presence on the Peninsula has left a lasting legacy in Spanish culture, and continues to shape contemporary Spanish attitudes to contemporary Muslim immigrants from North Africa, to global politics, and to their own position as a European nation. In this class we will address questions such as what does it mean to be a Western Muslim? Can Muslims and Christians live together in peace? What role do language, style of dress and social customs have as indicators of a person?s religion? We will read and analyze historical and literary texts, films and contemporary Spanish t.v. shows, and the arts (music, dance, painting) that address this issue. -- In this course we will explore the presence of Muslims and Arabs in historical past and in the current day in Spain. In 711 Muslims invaded the Iberian Peninsula and established a flourishing Islamic civilization that lasted for some 700 years. After 1609 though the last of the Muslims living in Spain were expelled from the Empire. However, the centuries of Muslims presence on the Peninsula has left a lasting legacy in Spanish culture, and continues to shape contemporary Spanish attitudes to Muslim immigrants from North Africa, to global politics, and to their own position as a European nation.

Span 1905 Freshman Seminar: Revolutions, and Human Rights in Latin America
A-F only, 3 credit(s);
Instructor: Ramos-Garcia, Luis A
Description: TOPIC TITLE: Human Rights in Latin America, Fall 2014 taught by Prof. Luis Ramos-Garcia. -- DESCRIPTION: This course will examine a historical and analytical view on how revolutions in Latin America (Cuban, Chilean, Argentinean, Nicaraguan, Salvadorian, Peruvian (Shining Path), and Colombian (FARC) triggered a bloody response from military and civilian dictatorships, and how Human Rights discourses responded in kind by creating Truth and Reconciliation Committees and by appealing to oral /written testimonies and to recovery of memory methodologies. Although the major theme of the course will be Latin American affairs (politics, economy, cultural discourses), the class will be oriented toward the relation between the first and the third worlds, and between cultural (resistant) independent communities and neocolonial multinational global discourses.

Span 2521 Spanish III
A-F only, 3 credit(s);
Instructor: Furness, Ryan C
Description: Student may contact the instructor or department for information.

Span 3011 Spanish Communication Skills
4 credit(s);
Instructor: STAFF
Description: This class is designed to further develop and strengthen language skills by integrating in a meaningful and "real world" fashion the student's ability to write, speak, read and understand modern Spanish at a level that is expected of majors and minors. Students will write summaries of lectures given by native speakers, two papers and reader's journals. They will give an oral presentation and read a variety of texts. The class will employ diverse learning techniques -- grammar review, audio exercises, paired work, small group work, all-class discussions, peer editing, and process writing -- to provide students with the appropriate opportunities to enhance their language skills as they learn academic content through the active use of the Spanish language. This course requires a major time commitment on the part of each student registered.
Style: 25% Lecture, 50% Discussion. 15% peer editing, 10% preparing and presenting projects
Grading: 20% mid exam, 20% quizzes, 10% in-class presentation, 10% class participation. 15% compositions and
Exam Format: Essays and short answers written in Spanish, together with grammar sections.

Span 3015 Spanish Composition and Communication
4 credit(s);
Instructor: STAFF
Description: Spanish 3015 is the first of the upper division sequence for Spanish majors and minors. To enroll in this class, a student must have successfully completed Spanish 1004 or Spanish 1014 or Spanish 1044 and a "High Pass" on the LPE is highly recommended. Students who have not taken Span 1004 (or equiv.) at the University of Minnesota must achieve a "high pass" on the LPE to enroll in Spanish 3015. This class is designed to further develop and strengthen the language skills acquired in the foundation courses. Rather than separating the internal disciplines inherent in second language study, this course seeks to integrate in a meaningful and "real world" fashion the student's ability to write, speak, read and understand modern Spanish at a level that is expected of majors and minors. Students will generate a series of creative and original compositions and will read a variety of texts from both Spain and Latin America. The class will employ diverse learning techniques -- grammar review, audio tape exercises, paired work, small group work, all class discussions, oral presentations, peer editing, process writing -- to provide students with the appropriate opportunities to enhance their language skills as they learn academic content through the active use of the Spanish language. This course requires a major time commitment on the part of each student registered.
Style: 25% Lecture, 50% Discussion. 15% peer editing, 10% preparing and presenting projects
Grading: 15% class participation. 5% participation in peer editing groups, 30% compositions and portfolio, 20% examinations, 10% reader's journal, 10% round-table discussion, 10% final research paper
Exam Format: Essays and short answers written in Spanish, together with grammar sections.

Span 3015H Spanish Composition and Communication
A-F only, 4 credit(s);
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); 3015, Spanish [major or minor] or Span-Port major Credit will not be granted if credit has been received for: TLDO 3105W; Meets CLE req of Writing Intensive
Instructor: STAFF
Description: SPAN 3105w se enfoca en las destrezas y los elementos basicos del analisis de cultura en el contexto del mundo hispanico. El programa es estructurado por una serie de problematicas centrales al desarrollo historico de las culturas de la Peninsula Iberica, asi como de America Latina: tras la examinacion detallada de objetos visuales, textuales, musicales y filmicos de estas regiones, identificaremos los discursos principales de su formacion.

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: Anchondo,Luis A
Description: Student may contact the instructor or department for information.

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 Siguenza y Gongora. Additionally, we will discuss the iconic figures of La Malinche and La Virgen de Guadalupe. Some of the concepts/issues to be addressed in the analysis of these texts are: Physical and Epistemological Violence, Divergent Agendas and Interpretations, Resistance and Adaptations, and Silences and Excesses. All writing assignments and class lecture/discussion are in Spanish.

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

**Grading:** 20% reports/papers, 10% special projects, 30% journal, 10% in-class presentation, 30% class participation. Participation 30%, Intellectual Journal 30%, Oral Presentations/Discussion Leader 10%, Bibliographic Research Project 10%, Final Research Paper 20%

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**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.

**Style:** 40% Discussion. student centered culture and special purpose language activities.

**Grading:** 50% other evaluation. Written reports and journals, online writing activities based on CD-ROM interviews, and development of brochure; 20% class participation and other class assignments such as discussion of readings and unit vocabulary quizzes, 30%

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**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 not but be involved in direct patient health care.

**Style:** 40% Discussion. student centered culture and special purpose language activities.

**Grading:** 50% other evaluation. Written reports and journals, online writing activities based on CD-ROM interviews, and development of brochure; 20% class participation and other class assignments such as discussion of readings and unit vocabulary quizzes, 30%

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**Span 3501 Roots of Modern Spain and Latin America**

3 credit(s); 3015, [3105W or TLDO 3105 or VENZ 3512 or instr consent ]Credit will not be granted if credit has been received for: SPAN 3501H;

**Instructor:** Anchondo, Luis A

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

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**Span 3510 Issues in Hispanic Cultures**

A-F only, 3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** Calvo, Maria Antonia

**Description:** Fall 2014. SPAN 3510 Issues in Hispanic Cultures. Tuesday and Thursday 8:15 to 9:30 am TOPIC TITLE: CONTEMPORARY SPAIN AND THE CHALLENGES OF IMMIGRATION DESCRIPTION: What motivates people to leave their country of birth? Who decides which people have the right to live in which countries? How does it feel to be a newcomer? What economic and social struggles do immigrants face? What obligation does a country have to its newest
residents? Who gets to stay and who must leave? What leads to acceptance of or resistance to increased cultural diversity? In this course we address these questions in the context of the changes that have occurred in Spain over the past one hundred years as it moved from being a country of emigrants, to being a destination for many people from around the world, to once again being a net exporter of human capital. The Spanish case will allow students to understand a host of issues common to human migration around the world.

**Exam Format:** Essay and short answer

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**Span 3512 Modern Latin America**

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

**Instructor:** Ocampo, Francisco Antonio

**Description:** This course is a survey of the major discourses of modernity that helped to shape Latin America from the wars of independence to the 1970s. We will examine the major discourses of modernity through its evolution during this period through primary and secondary literary texts and film, as well as through supporting critical and historical readings. Our readings and course materials will focus on the following historical/discursive phenomena: 1. Contradictions of Modernity: The Enlightenment and the Idea of Latin America 2. Contradictions of Modernity: Capitalism and Slavery 3. Pampa and Progress 4. Cronica and modernismo 5. Democratization of Culture: Mexican Revolution, Rumba, Bolero 6. Anti-Imperialism

Course requirements include written, take-home midterm exam, oral final exam, final essay of 8-10 pages, and an in-class presentation or course guide.

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

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**Span 3603 Jews and Muslims in Medieval Iberia**

**3 credit(s); Credit will not be granted if credit has been received for: JWST 3603; Meets CLE req of Arts/Humanities**

**Instructor:** Hamilton, Michelle Marie

**Description:** This course fulfills the Liberal Education requirement in Arts/Humanities. This course examines the cultural production of Sephardic Jews and Andalusi Muslims. Through a reading of the poetry of such authors as al-Mutamid, Ibn Khafaja, Samuel ha-Nagid and Moses Ibn Ezra, the prose fiction of al-Saraqusti, Judah al-Harizi and Juan Ruiz, and the philosophical treatises of Ibn Tufayl, Averroes and Maimonides we will explore how the extensive cultural assimilation among these groups in medieval al-Andalus complicates notions of identity (confessional, linguistic and ethnic), subalternity and postcoloniality common associated with modernity. While the Arab Andalusi scholars whose works we read combine ideas from the Muslim East (Baghdad) with both Greco-Roman and what we think of as Western European traditions to create what scholars of both Spanish and Arabic literature and culture recognize as uniquely Andalusian, the Jewish authors of al-Andalus take this unique Arabo-Andalusi tradition and adapt it to their own inherited cultural traditions to create a corpus of literary, philosophical and theological works that ultimately changed the nature of Judaism itself. Even once most of the courts and lands of Muslim al-Andalus had been conquered by Christians, these Andalusi traditions survived thanks to one of the most impressive translation movements of the Middle Ages, namely that of eleventh- through thirteenth-century Toledo, and in later centuries thanks to the diligent activities of the Muslim and Jewish minorities living in Christian lands, who were often forced to hide their literature and practice their religious rituals in secret. In the final weeks of the class we will explore how the literary, historical, philosophical and theological works of the major Jewish and Muslim thinkers of medieval Iberia studied in the first part of the class survived in different forms among later Spanish Christian intellectuals. Taught in English.

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**Span 3701 Structure of Spanish: Phonology and Phonetics**

**3 credit(s); 3015, [3107W or TLDO 3107 or VENZ 3107 or instr consent ] Credit will not be granted if credit has been received for: SPAN 3701H;**

**Instructor:** Face, Timothy L

**Description:** This course is 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

**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 3706 Spanish Applied Linguistics

3 credit(s);

**Instructor:** Klee, Carol Anne

**Description:** The objectives of this course are to introduce students to fundamental concepts in the field of linguistics and their application to the acquisition and teaching of Spanish as a second language. We will focus on aspects of Spanish second language acquisition that are particularly difficult for English speakers, examining research studies on the acquisition of the pronominal system, ser and estar, preterite and imperfect, subjunctive, and speech acts. This course will be of special interest to Spanish majors who intend to become Spanish language teachers, but will be of interest to anyone wanting to learn more about how Spanish is acquired as a second language.

**Style:** 50% Lecture, 15% Discussion, 30% Small Group Activities, 5% Student Presentation.

**Grading:** 40% mid exam, 20% final exam, 20% reports/papers, 15% written homework, 5% in-class presentation.

### Span 3800 Film Studies in Spanish

A-F only, 3 credit(s), max credits 9, 3 completions allowed;

**Instructor:** STAFF

**Description:** FALL 2014 TOPIC TITLE: SOUND AND VISION, HISPANIC FILM AESTHETICS AND ANALYSIS

DESCRIPTION: Sound and Vision introduces the student to various genres of narrative film in the Hispanic world (avant-garde, black comedy, drama, western, queer, psychological thriller, horror, melodrama) as well as to different cinematic styles. Although Sound and Vision examines the historical and social specificity of visual texts produced in Spain and Latin America, this course also presents a view of cinema as a transnational artistic practice, focusing on formal analysis of the aesthetic and ideological elements that comprise the multiple languages of film, and providing, at the same time, the basic skills necessary to read visual texts. (IN SPANISH)

### Span 3920 Topics in Spanish-American Literature

A-F only, 3 credit(s), max credits 9, 3 completions allowed; 3015, [3104W or TLDO 3104 or VENZ 3104 or instr consent ]Credit will not be granted if credit has been received for: SPAN 3920H;

**Instructor:** STAFF

**Description:** FALL 2014 TOPIC TITLE: RELATOS DE LO EXTRA?O, NARRATIVA INSOLITA IBEROAMERICANA

DESCRIPTION: For many years, Latin American and Spanish writers have contributed to non-realistic literary subgenres such as the fantastic and the marvelous, conceiving stories about physical oddities, supernatural phenomena, haunted spaces, uncharted islands, and parallel universes. In this course we will study the main elements of ?narrativas de lo insolito? (a blend of fantasy, horror, absurdist fiction, and science fiction) through the work of canonical authors such as Pablo Palacio, Maria Luisa Bombal, Adolfo Bioy Casares, Julio Cortazar, and Mario Levrero. Our discussions will also focus on 21st century tales of the ?unspeakable? and the uncanny, including works by Cecilia Eudave, Marina Perezagua, and Laura Fernandez. (IN SPANISH)

**Grading:** 30% mid exam, 40% reports/papers, 15% in-class presentation, 15% class participation.

### 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:** Marrero-Fente, Raul A

**Description:** SPAN 3972w is structured around the production of a 20-25 page research paper that demonstrates the mastery of both the content-based areas of inquiry and the linguistic and discursive competences taught in the Spanish Studies and Spanish and Portuguese Studies majors. Course assignments and materials are designed to hone students’ ability to formulate an interpretation of a cultural, literary, or linguistic object of the Spanish or Portuguese-speaking worlds; to support their reading with relevant examples and textual evidence; to adopt and maintain an analytical rhetorical stance; to employ a vocabulary and register appropriate for advanced academic discourse; and to integrate outside sources smoothly and effectively into their critical reading. The senior paper showcases the full range of skills and knowledge expected of students upon completion of the major programs of study, and ideally will represent the pinnacle of students’ undergraduate trajectory.

### 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 5190 The Crisis of the Old Regime: Spanish Literature of the Enlightenment and Romanticism**
- **3 credit(s);**
- **Instructor:** STAFF
- **Description:** This class is an overview of 18th- and 19th-century Spanish culture from 1775 to 1900. It focuses on the evolution of literature and the arts during the periods of the Enlightenment, Romanticism, and Realism/Naturalism. We will examine a variety of texts from different genres (theatre, poetry, short story, novel) and place them in their literary and historical contexts, in an attempt to describe Spain's uneven transition from the Old Regime to modernity. The list of authors includes Ramon de la Cruz, Moratin, Mesonero Romanos, Larra, Duque de Rivas, Espronceda, Becquer, Galdos, Pardo Bazan, and Clarin.

**Span 5550 Caribbean Literature: An Integral Approach**
- **3 credit(s);**
- **Instructor:** Hanneken, Jaime Elizabeth
- **Description:** Student may contact the instructor or department for information.

**Span 5590 The Impact of Globalization in Latin American Discourses**
- **3 credit(s);**
- **Instructor:** Ramos-Garcia, Luis A
- **Description:** Topic Title: The Impact of Globalization in Latin American Discourses with Prof. Luis A. Ramos-Garcia. Fall 2014. -- During the second half of the XX Century and the first years of the new century, discourses on global studies and human rights increasingly became some of the most controversial issues within Latin American discourses such as narrative, poetry, and drama studies. And yet, this hermeneutical approach did not resolve many tensions and contradictions embodied in various literary contexts introduced by postmodernist thinkers, writers and playwrights. By way of in-depth analysis and constant reflection, this course will attempt to explore recent fictional, theatrical, and theoretical works on the politics of globalism, human rights and gender equality, in a manner that will move beyond traditional and simplistic interpretations of nationalistic and/or critical discourses. Although, the realistic narratives of McOndo literature refer and allude to the popular cultures of contemporary Latin America as lived in its cities, shantytowns and suburbs, its gritty, hard-boiled depictions of poverty and crime prefer to examine a society heavily influenced by pervasive economic practices generated by a globalization movement, interested in increasing social class differences, and class struggle. Until recently much of the intellectual discussion on global studies influence, overlooked the counter movement tendency experienced by recent writing while adopting anthropological and axiological approaches moving beyond reified notions of 'culture', heavily influenced by global conceptualizations of power. Based on recent theoretical works on literary theory, drama, and human rights theory this course will attempt to come to a more nuanced understanding of the politics of globalism, and of the discussion of the limits of global discourses within various political discourses where Latin American Human Rights have become central to their definitions. CONTINUED ON DOWNLOADABLE SYLLABI.

**Span 5714 Theoretical Foundations of Spanish Syntax**
- **3 credit(s);**
- **Instructor:** Ocampo, Francisco Antonio
- **Description:** The structure of modern Spanish: Syntax. The course discusses linguistic notions present in the syntax of Spanish, such as: discrete and prototypic categorization, grammaticalization, grammatical relations, flow of information, transitivity. The discussion is centered in the possible explanatory role of these notions vis-a-vis syntactic phenomena in Spanish, such as: word order, hypotaxis, parataxis, clitics, discourse particles. The content is theoretical and students are expected to come to class with an adequate knowledge of Spanish grammar. The target audience are graduate students.
- **Required readings:** Taylor. _Linguistic Categorization_; and excerpts from various authors.
- **Style:** 60% Lecture, 40% Discussion.
Grading: 30% mid exam, 30% final exam, 40% problem solving.
Exam Format: essay

Span 5930 Topics in Ibero-Romance Linguistics: Spanish Second-Language Phonology
3 credit(s), max credits 9, 3 completions allowed;
Instructor: Face, Timothy L
Description: This course will focus on the Spanish second language phonology (Fall 2014).

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.

Spanish and Portuguese 214 Folwell Hall

SpPt 3600 Topics in Spanish and Portuguese Studies (Taught in English)
3 credit(s);
Instructor: Flaherty-Echeverria, Satty
Description: Student may contact the instructor or department for information.

SpPt 5995 Directed Teaching
S-N only, 1 credit(s);
Instructor: Matos-Schultz, F.
Description: Student may contact the instructor or department for information.

SpPt 5999 The Teaching of College-Level Spanish: Theory and Practice
3 credit(s);
Instructor: Melin, Charlotte Ann
Description: Student may contact the instructor or department for information.

Speech-Language-Hearing Sciences 115 Shevlin Hall

SLHS 1301V Physics & Bio Honors
A-F only, 4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Introduction to the physics and biology of spoken language; the talker's production of sounds and words; transmission of sound; the listener's perception of what was heard; and computer analysis and synthesis of speech. Lectures will be supported by computer animations that show, in slow motion, rapidly changing dynamic events in acoustics, by on-line computer analysis of speech, and by laboratory sessions. Objectives: 1) Provide students who have a limited physics and biology background with an introduction to the physics and biology of spoken language, a field that is not only interesting, but of considerable social importance because of the dominant role that speech, language, and hearing play in society; and 2) Introduce students to recent technological advances associated with spoken language such as digital signal processing systems and speech recognition techniques. The trek through history will begin with Kratzenstein, who designed the first speech synthesizer in 1179, and end with an examination of the ways in which current research from disciplines such as physics, biology, psychology, linguistics, speech and hearing science, and so forth contributes to our understanding of the physics and biology of spoken language.
Style: 60% Lecture, 40% Discussion.
Grading: 50% mid exam, 25% final exam, 25% laboratory evaluation.
Exam Format: multiple choice

SLHS 1301W The Physics and Biology of Spoken Language
4 credit(s); Meets CLE req of Physical Sciences; meets CLE req of Writing Intensive
Instructor: STAFF
Description: Introduction to the physics and biology of spoken language; the talker's production of sounds and words; transmission of sound; the listener's perception of what was heard; and computer analysis and synthesis of speech.
Lectures will be supported by computer animations that show, in slow motion, rapidly changing dynamic events in acoustics, by on-line computer analysis of speech, and by laboratory sessions. Objectives: 1) Provide students who have a limited physics and biology background with an introduction to the physics and biology of spoken language, a field that is not only interesting, but of considerable social importance because of the dominant role that speech, language, and hearing play in society; and 2) Introduce students to recent technological advances associated with spoken language such as digital signal processing systems and speech recognition techniques. The trek through history will begin with Kratzenstein, who designed the first speech synthesizer in 1179, and end with an examination of the ways in which current research from disciplines such as physics, biology, psychology, linguistics, speech and hearing science, and so forth contributes to our understanding of the physics and biology of spoken language.

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

**Grading:** 50% mid exam, 25% final exam, 25% laboratory evaluation.

**Exam Format:** multiple choice

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**SLHS 1302 Rate Your World: Quantifying Judgments of Human Behavior**

3 credit(s); Meets CLE req of Mathematical Thinking

**Instructor:** STAFF

**Description:** This course will allow students with little mathematics background to learn basic quantitative methods as they apply to measuring human behavior. Introductory mathematical principles will be applied to measuring behaviors such as: rating personality and attention, evaluating infant speech perception, studying opinion polls, measuring voice and sound, and quantifying speech recognition through cochlear implants. Material will be presented using a mixture of lecture and hands-on activities in class. Mid-term and final examinations will focus on lecture material. In-class activities will be analyzed and written into short reports.

**Style:** 40% Lecture, 30% Discussion, 30% Laboratory.

**Grading:** 25% mid exam, 25% final exam, 50% reports/papers.

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**SLHS 1401 Communication Differences and Disorders**

3 credit(s); Credit will not be granted if credit has been received for: SLHS 3401; Meets CLE req of Social Sciences

**Instructor:** STAFF

**Description:** Human communication is a complex interpersonal process that involves speech, language, and hearing. These three aspects of communication are made up of neurological, cognitive, sensory, anatomical, and physiological components, which come together and develop within social contexts. Functional communication skills are necessary to successfully participate in all aspects of society and any breakdown in speech, language or hearing will have an impact on one's daily life-at home, school, work, and/or community settings. In order to determine if a communication disorder exists, we need to have a clear understanding of what constitutes "normal" communication. The definition of what is normal or acceptable speech, language, and hearing behavior may vary according to age, gender, language or dialectal background, and culture. Thus, these factors must be considered when identifying and treating communication disorders. This course will survey a range of communication disorders affecting children and adults, and will explore the origin, assessment, and treatment of these disorders within the context of normal human variation. Reference to the professional fields of speech-language pathology and audiology will be given throughout the semester.

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**SLHS 1402 The Talking Brain**

3 credit(s); Meets CLE req of Social Sciences

**Instructor:** Deruiter, Mark

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

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**SLHS 1942 Freshman Seminar: Language and Communication Technologies**

A-F only, 3 credit(s); Meets CLE req of Technology and Society

**Instructor:** Zhang, Yang

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

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**SLHS 3302 Anatomy and Physiology of the Speech and Hearing Mechanisms**

3 credit(s);

**Instructor:** STAFF

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

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**SLHS 3305W Speech Science**

3 credit(s); Meets CLE req of Writing Intensive

**Instructor:** Watson, Peter J

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

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**SLHS 3401 Communication Differences and Disorders**

3 credit(s); Credit will not be granted if credit has been received for: SLHS 1401; Meets CLE req of Social Sciences
Instructor: STAFF
Description: Human communication is a complex interpersonal process that involves speech, language, and hearing. These three aspects of communication are made up of neurological, cognitive, sensory, anatomical, and physiological components, which come together and develop within social contexts. Functional communication skills are necessary to successfully participate in all aspects of society and any breakdown in speech, language or hearing will have an impact on one's daily life— at home, school, work, and/or community settings. In order to determine if a communication disorder exists, we need to have a clear understanding of what constitutes "normal" communication. The definition of what is normal or acceptable speech, language, and hearing behavior may vary according to age, gender, language or dialectal background, and culture. Thus, these factors must be considered when identifying and treating communication disorders. This course will survey a range of communication disorders affecting children and adults, and will explore the origin, assessment, and treatment of these disorders within the context of normal human variation. Reference to the professional fields of speech-language pathology and audiology will be given throughout the semester.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Carney, Arlene Earley
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Angerman, Sarah Kay
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Deruiter, Mark
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Finestack, Lizbeth Haller
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Schlauch, Robert S
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Windsor, Jennifer
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: Reichle, Joe E
- Description: Student may contact the instructor or department for information.

SLHS 3555H Honors Thesis
- A-F only, 1-2 credit(s), max credits 2, 1 completion allowed;
- Instructor: 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.
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  
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
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: Krause, Miriam O
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: Finestack, Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 5801 Audiologic Assessment I
3 credit(s);
Instructor: Schlauch, Robert S
Description: The first few weeks of this course will build upon the knowledge acquired in your introductory course in Audiology. You will be expected to know fine details about test procedures and test interpretation, including understanding the content of journal articles from your readings that address these issues. An important part of the transition from undergraduate to graduate study is to know how to support your clinical decisions and the procedures you select with journal citations. Audiologic Assessment II, the second course in the sequence, will introduce material that is not presented in any detail in most undergraduate curricula if it is presented at all. This course will emphasize physiological measures, such as ABR and otoacoustic emissions. Laboratory exercises are designed to complement the lectures in these areas. By the end of this two-course sequence, you will have a strong foundation in auditory diagnosis using both behavioral and physiological measures. The laboratory exercises and practical exams are designed to provide you with the skills to enter a practicum in a medical setting with adults. Audiologic Assessment III, a course that emphasizes balance function, will complete the series. After successful completion of this course you will be able to: 1) perform independently a basic audiologic assessment on an adult client. This includes case history, otoscopy, tuning fork tests, pure tone audiometry, masking, word recognition performance for monosyllabic words, and the aural acoustic immittance battery. 2) Determine the need for selecting an assessment tool from the basic battery of tests listed above 3) Know how to interpret the results for the basic battery of audiometric tests for persons with normal hearing and impaired hearing 4) Know the effectiveness and precision of various tests in the basic battery based on results from scientific studies published in peer-reviewed journals.

SLHS 5802 Hearing Aids I
3 credit(s);
Instructor: Gregan, Melanie J
Description: Student may contact the instructor or department for information.

SLHS 5806 Auditory Processing Disorders
A-F only, 3 credit(s);
Instructor: Angerman, Sarah Kay
Description: Student may contact the instructor or department for information.

SLHS 5807 Noise and Hearing Conservation
A-F only, 3 credit(s);
Instructor: Nelson, Peggy B
SLHS 5810 Laboratory Module in Audiology
1-2 credit(s), max credits 5, 5 completions allowed;
Instructor: Witherell,Kerry Lauren
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 8410 Seminar: Research
3 credit(s);
Instructor: Finestack,Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 8430 Proseminar in Speech-Language-Hearing Sciences
S-N only, 1 credit(s), max credits 10, 10 completions allowed;
Instructor: Nelson,Peggy B
Description: Student may contact the instructor or department for information.

SLHS 8720 Clinical Education in Speech-Language Pathology
S-N only, 1-8 credit(s), max credits 24, 24 completions allowed;
Instructor: Deruiter,Mark
Description: Student may contact the instructor or department for information.

SLHS 8803 Signals and Systems in Audiology
3 credit(s);
Instructor: Schlauch,Robert S
Description: Student may contact the instructor or department for information.

SLHS 8820 Clinical Education in Audiology
S-N only, 1-8 credit(s), max credits 24, 24 completions allowed;
Instructor: Deruiter,Mark
Description: Student may contact the instructor or department for information.

SLHS 8840 Audiology Externship
S-N only, 1-7 credit(s), max credits 7, 3 completions allowed;
Instructor: Deruiter,Mark
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Carney, Arlene Earley
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Angerman, Sarah Kay
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Deruiter, Mark
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Finestack, Lizbeth Haller
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Schlauch, Robert S
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Windsor, Jennifer
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Reichle, Joe E
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Kennedy, Mary R T
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: Nelson, Peggy B
Description: Student may contact the instructor or department for information.

SLHS 8994 Directed Research
1-12 credit(s), max credits 18, 18 completions allowed;
Instructor: 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.

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: Lisec, John Phillip Stephen
Description: Student may contact the instructor or department for information.

SMgt 3421 Business of Sport
A-F only, 3 credit(s);
Instructor: Hwang, Geumchan
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: Inoue PhD, Yuhei
Description: Student may contact the instructor or department for information.

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

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**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.

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**SMgt 3861 Legal Aspects of Sport**
- A-F only, 3 credit(s);
- Instructor: Wang, Sandy
- Description: Student may contact the instructor or department for information.

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**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.

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**SMgt 3893 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.

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**SMgt 3893 Directed Study in Sport Management**
- A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;
- Instructor: Allison JD, Rayla Mathison
- Description: Student may contact the instructor or department for information.

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**SMgt 3893 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.

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**SMgt 3893 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.

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**SMgt 3893 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.

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**SMgt 3893 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.

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**SMgt 3893 Directed Study in Sport Management**
- A-F only, 1-3 credit(s), max credits 3, 3 completions allowed;
- Instructor: Inoue PhD, Yuhei
- Description: Student may contact the instructor or department for information.

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**SMgt 3996 Practicum: The Sport Experience**
- S-N only, 2-8 credit(s), max credits 8, 4 completions allowed;
- Instructor: Buysse PhD, Jo Ann
- Description: Student may contact the instructor or department for information.
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 1905 Freshman Seminar: Genes, Climate, Internet: Big Data  
A-F only, 3 credit(s), max credits 6;  
Instructor: Chatterjee, Singdhansu Bhusan  
Description: Student may contact the instructor or department for information.

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 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: Geyer, Charles J

Description: All course material is on the web at the Course URL where slides, handouts, computer examples, homework assignments, and old tests can be found. This section does not have a required textbook. All Stat 5101 sections are supposed to cover the same material as Math 5651 and vice versa. One can follow Math 5651 with Stat 5102 or follow Stat 5101 with Math 5652. This section has more emphasis on multivariate distributions and multiparameter families of distributions.

Style: 80% Lecture, 20% Demonstration.

Grading: 20% mid exam, 40% final exam, 20% written homework. there are two midterms, so these add to 100%

Exam Format: problems to solve, see old tests on class web site

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 5201 Sampling Methodology in Finite Populations
3 credit(s);
Instructor: Almquist, Zack W

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

Stat 5302 Applied Regression Analysis
4 credit(s);
Instructor: Weisberg, Sanford

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

Stat 5302 Applied Regression Analysis
4 credit(s);
Instructor: Peng, Bo

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

Stat 5303 Designing Experiments
4 credit(s);
Instructor: Oehlert, Gary W

Description: This course covers basic experimental designs, when to use them, and how to analyze the results. We cover: completely randomized designs, factorial treatment structures, random and mixed effects models, complete and incomplete blocks, covariates, split plots, and (sometimes) response surfaces. Primarily lecture based, with discussion and computer work in the lab. This course is aimed at nonstatistics graduate students, but advanced undergraduates can also attend.

Style: 90% Lecture, 10% Demonstration.

Grading: 40% mid exam, 25% final exam, 15% special projects, 20% written homework.

Exam Format: problem solving
Stat 5421 Analysis of Categorical Data  
3 credit(s);  
Instructor: Xu, Gongjun  
Description: Student may contact the instructor or department for information.

Stat 5601 Nonparametric Methods  
3 credit(s);  
Instructor: Helwig, Nathaniel Erik  
Description: Student may contact the instructor or department for information.

Stat 5701 Statistical Computing  
A-F only, 3 credit(s);  
Instructor: Rothman, Adam Joseph  
Description: Student may contact the instructor or department for information.

Stat 5993 Tutorial  
1-6 credit(s), max credits 12, 12 completions allowed;  
Instructor: STAFF  
Description: Students may contact the department for information.

Stat 8051 Advanced Regression Techniques: linear, nonlinear and nonparametric methods  
A-F only, 3 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. 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.

Stat 8053 Applied Statistical Methods 3: Multivariate Analysis and Advanced Regression  
A-F only, 3 credit(s);  
Instructor: Geyer, Charles J  
Description: Student may contact the instructor or department for information.

Stat 8101 Theory of Statistics 1  
3 credit(s);  
Instructor: Zou, Hui  
Description: Student may contact the instructor or department for information.

Stat 8111 Mathematical Statistics I  
3 credit(s);  
Instructor: Meeden, Glen Dale  
Description: Student may contact the instructor or department for information.

Stat 8313 Topics in Experimental Design  
3 credit(s);  
Instructor: Nachtsheim, Christopher John  
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: Jiang, Tiefeng  
Description: Student may contact the instructor or department for information.

Stat 8931 Advanced Topics in Statistics
Stat 8992 Directed Readings and Research
3 credit(s), max credits 12, 4 completions allowed;
Instructor: Jones, Galin
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Geyer, Charles J
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Hawkins, Douglas M
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Meeden, Glen Dale
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Grund, Birgit
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Oehlert, Gary W
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Cook, R. Dennis
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Weisberg, Sanford
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Jiang, Tiefeng
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Rendahl, Aaron
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Jones, Galin
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Chatterjee, Singdhansu Bhusan
Description: Student may contact the instructor or department for information.
Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Shen,Xiaotong Tom
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Wang,Lan
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Yang,Yuhong
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Zou,Hui
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Doss,Charles R
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Xu,Gongjun
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Rothman,Adam Joseph
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Almquist,Zack W
Description: Student may contact the instructor or department for information.

Stat 8992 Directed Readings and Research
1-6 credit(s), max credits 12, 3 completions allowed;
Instructor: Helwig,Nathaniel Erik
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
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: Lekas, Michelle Yvonne
Description: Student may contact the instructor or department for information.

SCMC 3201 Fundamentals of Digital Filmmaking
A-F only, 4 credit(s);
Instructor: Snapko, James Thomas
Description: Student may contact the instructor or department for information.

SCMC 5001 Critical Debates in the Study of Cinema and Media Culture
4 credit(s);
Instructor: Stout, Graeme
Description: Student may contact the instructor or department for information.

Studies of Science and Technology  746 Heller Hall

SST 8000 Colloquium
S-N only, 1.5 credit(s), max credits 3;
Instructor: STAFF
Description: This colloquium is a series of weekly lectures by nationally and internationally known scholars with diverse disciplinary and methodological backgrounds speaking on a variety of issues on the philosophy and history of science and technology.

Supply Chain and Operations  3-140 Carlson School of Management

SCO 2550 Business Statistics: Data Sources, Presentation, and Analysis
A-F only, 4 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

SCO 3001 Introduction to Operations Management
A-F only, 3 credit(s);
Instructor: STAFF
Description: Basic concepts, principles, and techniques for managing manufacturing and service operations. Emphasis on decision making in the operations function of organizations. Quantitative and qualitative methods for improving the management of operations stressed. Management students provided with an appreciation of the operations function of organizations.
Style: 50% Lecture, 30% Discussion. interactive games
Grading: 20% mid exam, 30% final exam, 10% quizzes, 15% class participation, 25% problem solving.
Exam Format: multiple choice, short answer, problem solving
SCO 3041 Project Management  
A-F only, 2 credit(s);  
Instructor: Buchner, Thomas Wayne  
Description: Student may contact the instructor or department for information.

SCO 3045 Sourcing and Supply Management  
A-F only, 2 credit(s);  
Instructor: 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: Azman, Bob  
Description: Student may contact the instructor or department for information.

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, Material 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 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 speakers.

SCO 6041 Project Management  
A-F only, 2 credit(s);  
Instructor: Hardcopf, Rick Alan  
Description: Student may contact the instructor or department for information.

SCO 6041 Project Management  
A-F only, 2 credit(s);  
Instructor: Brennan, Heather A
**SCO 6051 Service Management**
A-F only, 2 credit(s);
Instructor: Azman, Bob
Description: Student may contact the instructor or department for information.

**SCO 6059 Quality Management and Lean Six Sigma**
A-F only, 4 credit(s);
Instructor: Huchendorf, Steven Craig
Description: Student may contact the instructor or department for information.

**SCO 6850 Topics in Operations and Management Science: Operational Excellence via Lean Thinking**
A-F only, 2-4 credit(s), max credits 12, 4 completions allowed;
Instructor: Shah, Rachna
Description: Student may contact the instructor or department for information.

**SCO 8652 Regression Analysis**
A-F only, 3 credit(s);
Instructor: Nachtsheim, Christopher John
Description: Student may contact the instructor or department for information.

**SCO 8711 Research in Operations Strategy**
A-F only, 3 credit(s);
Instructor: Shah, Rachna
Description: Student may contact the instructor or department for information.

**SCO 8721 Management of Technological Operations**
A-F only, 3 credit(s);
Instructor: Sinha, Kingshuk Kanti
Description: Student may contact the instructor or department for information.

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**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**
A-F only, 3 credit(s);
Instructor: Nadav, Amir J
Description: Student may contact the instructor or department for information.

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**Sustainable Agricultural Systems  411 Borlaug Hall**

**SAgri 8010 Colloquium in Sustainable Agriculture**
A-F only, 2 credit(s);
Instructor: Sheaffer, Craig Charles
SAgr 8020 Field Experience in Sustainable Agriculture
- S-N only, 1-4 credit(s), max credits 4, 1 completion allowed;
- Instructor: Sheaffer, Craig Charles
- Description: Student may contact the instructor or department for information.

Swahili 808 Social Sciences Tower

Swah 1221 Beginning Swahili, Semester I
- 5 credit(s);
- Instructor: STAFF
- Description: Student may contact the instructor or department for information.

Swah 3225 Intermediate Swahili
- 5 credit(s);
- Instructor: Muaka, Angaluki
- Description: Student may contact the instructor or department for information.

Swah 4221 Beginning Swahili I
- 2 credit(s);
- Instructor: STAFF
- Description: Student may contact the instructor or department for information.

Swah 4225 Intermediate Swahili
- 2 credit(s);
- Instructor: Muaka, Angaluki
- Description: Student may contact the instructor or department for information.

Swedish 320 Folwell Hall

Swed 1001 Beginning Swedish
- 5 credit(s); Credit will not be granted if credit has been received for: SWED 4001;
- Instructor: STAFF
- Description: This is the first course in the first-year language instruction sequence (1001-2), designed to develop a basic communicative proficiency in Swedish. Students will practice the four language skills (speaking, writing, reading, and listening) and learn to handle simple, everyday transactions. Class sessions will emphasize interactive communicative activities in pairs and small groups, with a focus on improving listening and speaking skills. Additional class time will be spent on reading, writing, and grammar. Students are expected to practice these skills outside of class as well. Learning about life and culture in Sweden is an integral part of the course. See the description for Swed 4001 for an option for qualified students to register for this course for 2 credits (and lower tuition) instead of 4 credits.
- Style: 10% Lecture, 70% Discussion, 20% Laboratory
- Grading: 100% other evaluation. 50% reading/writing, 50% oral/aural
- Exam Format: structured exercises in all 4 modalities and grammar, pronunciation, vocabulary and culture

Swed 1003 Intermediate Swedish
- 5 credit(s); 1002 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); 1004 in another language or passing score on LPE or grad student 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 received the Graduation Proficiency Test (GPT) in another language or are a graduate student or are not seeking a CLA degree, you may register for Swed 1001 under the number Swed 4001 for 2 credits. Contact the department office, (612) 625-2080, for permission.

Swed 4003 Intermediate Swedish
2 credit(s); 1004 in another language or passing score on LPE or grad student Credit will not be granted if credit has been received for: SWED 1003;
Instructor: STAFF
Description: See the course description for Swed 1003. This 4xxx-level course designator is a special option for qualified students to take the 1xxx-level course for reduced credits. If you have already passed the Graduation Proficiency Test (GPT) in another language or are a graduate student or 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.

TMDP 8441 Seminar in Temporomandibular Disorders & Orofacial Pain
A-F only, 1 credit(s);
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, 3 credit(s), max credits 4, 1 completion allowed; Honors student Credit will not be granted if credit has been received for: TH 1101W; Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Channer, Lisa E
Description: Student may contact the instructor or department for information.

Th 1101W Introduction to the Theatre
3 credit(s), max credits 4, 1 completion allowed; Credit will not be granted if credit has been received for: TH 1101V; Meets CLE req of Arts/Humanities; meets CLE req of Writing Intensive
Instructor: Channer, Lisa E
Description: Student may contact the instructor or department for information.

Th 1102 Stage, Screen, Society: Performance in the Media Age
3 credit(s); Meets CLE req of Arts/Humanities
Instructor: Werry, Margaret L
Description: This course explores the way drama shapes communication and meaning-making in the media age. How do we perform ourselves on Facebook? How do news media make dramatic stories out of current events? Is the reality of Reality TV really real? What is reality anyway in a world where everyday life is mediatised by Facebook, YouTube, and Twitter? And now that performances go viral globally, who are we performing for and what do those performances come to mean for different audiences? In this course, we begin by looking at what dramatic techniques new media has inherited from old media, such as film and television drama. We then focus on topics in contemporary media: news stories, social media avatars, viral videos, reality television dramas, satirical news shows, video-gaming and machinima. Students learn to analyze contemporary media through a combination of lectures, viewings, discussion, in-class workshops, individual and hands-on group assignments. This course will be web enhanced but the URL is not yet available.
Style: 30% Lecture, 15% Film/Video, 30% Discussion, 15% Small Group Activities, 10% Guest Speakers. Class workshops and viewing videos
Grading: 15% mid exam, 25% reports/papers, 20% special projects, 20% reflection paper, 20% class participation.

Th 1301 Acting/Non-Majors
3 credit(s);
Instructor: STAFF
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; 20% Attitude & Growth.

**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.

**Th 1322 Creating the Performance**
- **3 credit(s);**
- **Instructor:** Longhi, Kym R
- **Description:** Student may contact the instructor or department for information.

**Th 1322 Creating the Performance**
- **3 credit(s);**
- **Instructor:** Sommers, Michael J
- **Description:** Student may contact the instructor or department for information.

**Th 1361 Singing for Musical Theatre**
- **A-F only, 3 credit(s);**
- **Instructor:** Baker, Dawn E
- **Description:** The focus of this course is on singing, interpretation, and audition techniques for Musical Theatre, culminating in solo and ensemble presentations at a final class performance. Since each student is instructed individually, all vocal levels, from beginning to advanced, are welcome in this class. Due to the ensemble and performing emphasis of this course, attendance is required and will figure in grading.
- **Style:** 100% Studio. vocal performance
- **Grading:** 20% in-class presentation, 40% class participation, 40% other evaluation. Final class Cabaret performance
- **Exam Format:** vocal performance

**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:** Lorca, Marcella Kingman
- **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);**
Th 1905 Freshman Seminar: 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 Kristin Chenoweth in 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. For ten years, Dr. Elizabeth Nash was a leading coloratura soprano in European opera houses. She is an associate professor in the Department of Theatre Arts and Dance and the author of the biographies Geraldine Farrar Opera's Charismatic Innovator (second edition); Autobiographical Reminiscences of African-American Classical Singers, 1853-Present; The Memoirs of Sylvia Olden Lee, Premier African-American Classical Vocal Coach; Pieces of Rainbow and The Luminous Ones, A History of the Great Actresses.

Th 1950 Topics in Theater
2 credit(s), max credits 6;
Instructor: Longhi, Kym R
Description: Students will explore the art of mime as a comedic, epic and poetic form, while developing skills for physical performance. This course focuses on the body's power to tell stories, to reveal the invisible world of imagination and to create poetic metaphor. Techniques and theory will include the pantomime of Marcel Marceau, the plastyka of Henryk Tomaszewski, and the corporeal mime of Etienne Decroux. Through exercises in technique and composition students will develop skills and proficiency in the art of mime. Specific techniques include: compression of space, time and idea; counterweights and contrapuntal movement; connecting impulse to action; punctuation of movement; spatial focus; timing and musicality; reflection and identification; isolations and articulations of the body.
Style: 5% Discussion, 75% Laboratory, 20% Student Presentation.

Th 2391 BFA Acting III
A-F only, 3 credit(s);
Instructor: Price, Joe
Description: Student may contact the instructor or department for information.

Th 2392 BFA Voice and Speech III
A-F only, 2 credit(s);
Instructor: Enneking, Annie Michelle
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: Obolensky, Kira
Description: Student may contact the instructor or department for information.
Th 3171 History of the Theatre: Ancient Greece Through Neo-Classicism
3 credit(s);
Instructor: 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 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 3370 BA Mentoring
A-F only, 1 credit(s), max credits 4, 4 completions allowed;
Instructor: Seifert, Luverne G
Description: Student may contact the instructor or department for information.

Th 3521 Introduction to Scenic Design for Theater and Performance
3 credit(s);
Instructor: Stanley, Joseph H
Description: Student may contact the instructor or department for information.

Th 3571 Introduction to Stage Technology
A-F only, 3 credit(s);
Instructor: Riley, Megan Elizabeth
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:** Purpose of this class is to help you understand the function of stage management in theatre and the performing arts as well as teach you the organizational and communication skills needed in order to succeed as a stage manager.

**Style:** 45% Lecture, 45% Discussion, 10% Guest Speakers.

**Grading:** 20% final exam, 10% reports/papers, 35% special projects, 20% quizzes, 5% written homework, 5% attendance, 5% class participation.

**Th 3950 Topics in Theatre: Scene Study**
3 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: German Play: Brecht**
3 credit(s), max credits 8, 8 completions allowed;
Instructor: Rothe, Matthias
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: Pahwa, Sonali
Description: Plays create worlds with their own logics, fusing fragments of real worlds into spaces of new experience. This class offers ways to interpret dramatic literature strategically by focusing on plays that stage encounters between American and Arab worlds. The recurring theme of Iraq in recent American drama is matched by representations of Arab-American encounter in Arabic drama post 9/11. By analyzing plays that embody encounters at cultural frontiers, we explore possibilities for exchange, translation, and world-making through dramatic literature. We contextualize these exchanges within contemporary transnational theatre circuits, which provide alternatives to the global imagination of mass media.

**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 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:** Kuflinec, 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, Barbara 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 5510 Drawing, Rendering, and Painting for the Theatre Designer I
3 credit(s);
Instructor: Donohue, John C
Description: Student may contact the instructor or department for information.

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 5545 Stage Lighting Technology
3 credit(s);
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: 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 2014 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 costume piece.
Style: 25% Lecture, 50% Laboratory, 25% Student Presentation.
Grading: 50% special projects, 50% attendance.

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: Practical experience in stage management for specific productions of the University Theatre with emphasis on rehearsal and performance. Mandatory weekly meetings with the PSM required
Style: 100% Laboratory. "Class" time reflects all rehearsals production meetings, meeting with the PSM, and performances
Grading: 100% other evaluation.

Th 5950 Topics in Theatre: Multimedia/Projection Project
3 credit(s), max credits 20, 20 completions allowed;
Instructor: Gwinup, Martin Bruce
**Description:** MULTIMEDIA DESIGN & DEVELOPMENT Are you interested in the use of projections in live performance? Are you interested in designing content for projections to serve as backgrounds, storytelling, interactive events, etc.? Then this could be a course for you. The focus of this course is to develop skills and creativity in designing and creating Multimedia (moving image, still image, animation, text, morphs, sound, etc) for live performance. The course will work on a number of topics in the field including; communication and collaboration with the rest of the artistic team (director, choreographer, other designers?); ways to incorporate the images into the production and supporting the action and storytelling on stage; use of software and other technologies for design and development; technologies and techniques to incorporate interactivity between performers and projections (and possibly audience); paperwork, organization and communication to bring everything to a successful conclusion. Projects will include designing with multimedia and working with software and technologies to develop individual and group presentations. This course is about development and will not get into the specifics of projectors, playback, projection surfaces, and systems design and hook up. We will discuss these things in this course far enough to support the class projects. This will be covered in TH5554 Multimedia for Live Performance. That course will be taught in the following year.

This course has no prerequisites however the student may find it beneficial if they have some background or course work in video and or audio.

**Style:** 20% Lecture, 15% Discussion, 45% Laboratory, 10% Student Presentation, 10% Demonstration.

**Grading:** 60% special projects, 5% attendance, 15% in-class presentation, 10% class participation, 10% problem solving.

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**Th 5950 Topics in Theatre: Multimedia/Projection Design & Development**
3 credit(s), max credits 20, 20 completions allowed;
**Instructor:** Gwinup, Martin Bruce
**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 8102 Theatre Historiography**
3 credit(s);
**Instructor:** Kobialka, Michal A
**Description:** Student may contact the instructor or department for information.

**Th 8115 History and Theory of Western Theatre: 20th Century Through World War II**
3 credit(s);
**Instructor:** Pahwa, Sonali
**Description:** The theatre and political performances of the early twentieth century were marked by technological transformations, radical politics, and the contestation of empire. This course approaches performance of the era in the mode of radical embodiment, both critical and conservative. Reading avant-gardist manifestoes and plays, performative constructions of race, and nationalist parades and performances, we examine radical dramaturgies in contexts including Leftist and Fascist Europe, Japan, Egypt, and Harlem.

**Th 8510 Professional Design Workshop**
A-F only, 2 credit(s), max credits 4;
**Instructor:** Dilliard, Marcus F
**Description:** Student may contact the instructor or department for information.

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**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 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.

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: Weimerskirch, Marcia L
Description: Student may contact the instructor or department for information.

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: Homler, Scott A
Description: Student may contact the instructor or department for information.

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: Godfrey, LeeAnne Berger
Description: This course is designed to provide international students with the skills to examine and process the values, contexts, and goals of the American higher educational system as it compares to their previous experiences. It will also help students take full advantage of studying at an American university by providing a deeper understanding of how to navigate the academic system. Goals of the course are: 1) to become active and engaged members of their new learning community, 2) to build academic skills that will allow students to be successful in college life, 3) to develop the abilities to be critical examiners of new material and to be able to express ideas and personal values as university students and members of a global society, 4) to enhance students' cross-cultural awareness and communication skills. Students will read articles related to various student experiences in the American university system, discuss and compare these readings in group discussions and class presentations, and also share their reflections through writing.

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 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: Kayzar, Brenda
Description: Drawing from multiple disciplines, this course examines the complexities of urban and metropolitan environments. A breadth of topics is covered amid changing social, political and economic contexts including governance, technology, planning and design concepts, investment and uneven development, citizen activism and cultural representations in art and film.
Style: Writing intensive, 4 short papers, 3 short answer quizzes.
Grading: Writing intensive, 4 short papers, 3 short answer quizzes.

UrbS 3001W Introduction to Urban Studies: The Complexity of Metropolitan Life
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Kayzar, Brenda
Description: Drawing from multiple disciplines, this course examines the complexities of urban and metropolitan environments. A breadth of topics is covered amid changing social, political and economic contexts including governance, technology, planning and design concepts, investment and uneven development, citizen activism and cultural representations in art and film.
Style: Writing intensive, 4 short papers, 3 short answer quizzes.
Grading: Writing intensive, 4 short papers, 3 short answer quizzes.

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 3900 Urban Studies Internship Seminar
A-F only, 2 credit(s), max credits 4;
Instructor: Pentel, Paula R
Description: The purpose of the internship component within the Urban Studies program is to allow students to experience work that is relevant to urban issues and that represents a possible career path. The internship seminar is open to any student who is completing an internship and wishes to receive academic credit for the internship. The seminar is intended as a forum, or arena, in which students share their experiences of the professional world with one another and relate those experiences to broader issues. Over the term you will analyze the mission and internal structure of your internship organization and contemplate the relationship between your personal, academic, and professional goals and the internship agency. Students are required to complete no less than 140 hours over the course of a term.

UrbS 3955W Senior Paper Seminar
A-F only, 2 credit(s); Meets CLE req of Writing Intensive
Instructor: Pentel, Paula R
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 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: Style: 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: Currently a wide variety of nano-structured materials are now used in commodities, pharmaceutics, cosmetics, biomedical products, and industries. Nanoprobes functionalized with antibodies and drugs are being developed for treatment of many diseases including stroke and brain disorders. Nanomaterials, despite possessing more novel and unique physicochemical properties, also have an unpredictable impact on human health. Commonly used nanoparticles used in medicine are: metallic nanoparticles, metal oxide nanoparticles, dendrimers, quantum dots, nanoclusters, nanocrystals, nanowires, fullerenes, fullerene-based derivatives, single- and multi-wall carbon nanotubes, functionalized carbon nanotubes, polymer nanoparticles, carbon black, nano-coatings, and others. Nanoparticles interact with biological systems differently than bulk materials, thus nanoparticles have generated intense interest. Thus, the aim of this course is to discuss use of nanotechnology in scientific research and to assess the impact of nanomaterials on biological systems. Objectives After completing this course, students will be able to: 1. Describe structure and properties of nanomolecules. 2. Understand Application of nanoparticles in biology and medicine. 3. Uptake and cytotoxicity of different forms of nanoparticles. 4. Apply nanoparticle methodology in toxicology

VMed 5165 Surveillance of Foodborne Diseases and Food Safety Hazards
2 credit(s); [PUBH 5330, [professional school or grad student]] or instr consent Credit will not be granted if credit has been received for: PUBH 6181;
Instructor: Hedberg, Craig W
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 5196 Dairy Production Medicine
A-F only, 4 credit(s);
Instructor: Fetrow, John
Description: Student may contact the instructor or department for information.

VMed 5210 Advanced Large Animal Physiology I
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 5240 Advanced Small Animal Pathobiology I
A-F only, 1 credit(s);
Instructor: Patterson DVM, Ned
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 5594 Research in Veterinary Medicine
0.5-4 credit(s), max credits 8;
Instructor: Rahn, Wendy Marie
Description: Student may contact the instructor or department for information.

VMed 5594 Research in Veterinary Medicine
0.5-4 credit(s), max credits 8;
Instructor: Sreevatsan, Srinand
Description: Student may contact the instructor or department for information.

VMed 5594 Research in Veterinary Medicine
0.5-4 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 in-depth 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 5921 Seminar in Food Protection and Defense
1 credit(s);
Instructor: Kircher,Amy  
Description: Student may contact the instructor or department for information.

**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 5994 Advanced Clinical Epidemiology**  
A-F only, 1 credit(s);  
Instructor: Wells,Scott J  
Description: Student may contact the instructor or department for information.

**VMed 5996 Professional Communications: Policy Issue Briefs**  
S-N only, 1 credit(s), max credits 2;  
Instructor: Hueston DVM,Will  
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 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**
Veterinary Population Medicine

VPM 1550 Introduction to the horse including care, handling, and recognizing behaviors
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
2 credit(s);
Instructor: Vallandingham,Kelly L
Description: Student may contact the instructor or department for information.

VPM 1905 Freshman Seminar: Garbage, Government, and the Globe
A-F only, 2 credit(s), max credits 3, 1 completion allowed;
Instructor: Singh, Ashok K
Description: Garbage, in broad sense, can be defined as anything (solids, liquid or gas) carelessly discarded because it is perceived to be worthless in our homes, businesses, institutions and factories. When humans were hunters and gatherers, they consumed what was needed, discarded what could not be used and moved on. The discarded items degraded into reusable nutrients. Thus, the humans' interaction with the environment was well balanced. This changed as the industrial revolution led to the development of large industries and humans began to invent things that were not part of the nature, thus the natural balance began to misbalance. This resulted in accumulation of garbage into the environment, resulting in pollution of the atmosphere, land and water sources. Recently, economic globalization has further increased the magnitude of environmental pollution and ensuing deterioration of public health. If the current trend is not reversed, planet Earth may eventually become uninhabitable. Therefore, the aims of this course are to discuss (1) different issues related to the generation, release and handling of garbage, (2) possible effects of household, industrial and agricultural garbage on global environment and public health, (3) governmental response to the emerging problems, and (4) strategies that can be
used to reverse the damage being done to planet Earth. The students registered for this course will be able to: (i) Explain garbage in broad sense. (ii) Learn the processes that facilitate generation and accumulation of garbage. (iii) Understand the mechanisms responsible for pollution of the Earth's environment. (iv) Characterize the health effects of the polluted environment. (v) Explain remediation steps that may halt or repair the damage. (vi) Strategize use of garbage to generate energy.

**VPM 1905 Freshman Seminar: Poison, Poisoning and the Society**  
A-F only, 2 credit(s), max credits 3, 1 completion allowed;  
**Instructor:** Singh,Ashok K  
**Description:** Poisons (also known as toxins) are all around us, in air we inhale, in water we drink, in grocery store we frequently visit and in the house we live in. In general poisons have severe impact on human health and the society. Some of the highly publicized poisoning episodes are listed below. - At 8:15 on the morning of March 20, 1995, people traveling in Tokyo subway lines during rush hour suddenly got very sick for no apparent cause, many died within minutes. Later investigations revealed that the train was hit with a lethal gas called sarin. - On March 24, 1989, the tanker Exxon Valdez, en route from Valdez (Alaska) to Los Angeles (California) ran aground on Bligh Reef in Prince Williams, Alaska, causing the largest oil spill to date in U.S. waters. - On 20th April 2010, an explosion of deep-water Horizon killed 11 men working on the platform and injured 17 others. The gushing well-head released oil for about three month when it was capped on 15 July 2010. About 4.9 million barrels (780,000 m3) of crude oil escaped from the well just before it was capped. - Have you been to Washington DC and seen the Potomac River? At places the water is covered with thick growth of algae. - Dangerous insect eradicators can be purchased from grocery stores and often children get exposed to the chemicals. Washing detergents are dangerous to the environment. Factories emit tons of toxic gases into the environment. Food often gets contaminated with toxic bacteria such as E coli and salmonella. These poisoning episodes, because of their enormity, draw public's attention. However, humans get exposed to poisons from their everyday activities that mostly go unnoticed. This freshman seminar introduces poisons and poisoning to the students who are interested in knowing and understanding the poisons' health effects and their impact to the society. The course identifies potential health hazards of poisons and methods for preventing exposure. Chemicals we encounter in everyday life are used as examples to evaluate the hazards and risk of exposure and put them into perspective. Students will learn the basic principles of toxicology; tools for assessing the toxicology of chemicals; effects of chemicals on the body; why some people are more sensitive to chemicals than others. An understanding of the relationship between poisons and the society will help us reduce poisoning incidences.  
**Style:** 10% Lecture, 20% Film/Video, 30% Discussion, 10% Small Group Activities, 30% Student Presentation. The class has an interactive format including active-learning, student-participation and group activities.  
**Grading:** 20% reports/papers, 30% quizzes, 25% in-class presentation, 25% class participation.

**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 effect 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.

**Vietnamese**  
220 Folwell Hall  

**Viet 1011 Beginning Vietnamese I**  
A-F only, 4 credit(s);  
**Instructor:** STAFF  
**Description:** VIET 1011 is the first course of a two-semester sequence of beginning Vietnamese. This course will familiarize students with the sound system and alphabet of Vietnamese, provide systematic presentation of basic grammar, and practical use of the language by stressing extensive practice in conversation, listening, reading, and writing. The use of English in the classroom will be kept to a minimum; Vietnamese will be used whenever possible. By the end of the course the student should be able to understand and respond appropriately to simple questions and statements in Vietnamese. The student should be able to read and react to a variety of simple Vietnamese texts with some difficulty, and deal with some basic everyday living situations. Throughout the course students will learn about Vietnamese culture.

**Water Resources Science**  
173 McNeal Hall  

**WRS 5050 Special Topics in Water Resources Science: Watershed Specialist Training**  
A-F only, 2-3 credit(s), max credits 3, 1 completion allowed;
Instructor: Lewandowski, Ann M
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: 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  214 Nolte Center

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 classrooms. 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 PhD, Virginia M
**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.

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:** Despite certain skeptics that claim the contrary, young people do read outside of school. Much, if not most,
on-school student reading is done in magazines and online, in various magazine-like or magazine-related venues.
Specialized magazines educate young people with interesting, significant information in areas such as art, fashion, health
and music. Other people are news junkies and read newspapers, blogs, and online versions of new magazines. Small
publications, often local in nature, also provide immigrant groups and others with important information and a sense of
community. Increasingly, this reading is taking place on mobile devices. Electronic publications are also changing the very
definition of a magazine. This course asks students to learn about what they likely already read, and to discuss and write
about those texts as cultural artifacts as they form new academic interests and reading habits. Part of this study is to
participate in the new writing that is conceived for multimedia outlets. From Fashion to Fashioning a World will provide
students interested in pursuing Journalism, Art, English, Fashion Design and many other majors the opportunity to study
magazines and other smaller publications as an academic topic. Forms of magazine writing and reading, magazine visuals,
magazine production, magazine audience reception, and current forms of zines are some of the topics to be discussed
and written about in the course. Students will study both well-known national and international publications as well as local
publications. Students will be asked to think about how publications contribute to the making and telling of their own stories,
whether as a young person, a gendered person, an immigrant, a member of a particular ethnic/racial group, a person with
particular topical interests (gaming or health, for example) and/or individuals with other markers. Students will learn to think
of how the magazine’s essential multimodal aspect conveys meaning and significance for readers. Students will learn
about a variety of approaches commonly used to study magazines.

**Writ 3001 Introduction to Technical Writing and Communication**
A-F only, 3 credit(s);
**Instructor:** Breuch, Lee-Ann Kastman
**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:** WRIT 3029W (Business and Professional Writing) is an advanced writing course designed to practice writing
for various purposes/audiences. The content of the course is oriented to workplace collaboration and issues of professional
literacy. This course addresses business-related issues and focuses on communication among people in organizations,
emphasizing the ways written communication has impact through elements of style, tone, and organization. Student work must reflect an understanding of how writing impacts other people. Potential genres include proposals, reports, Web content, e-mail, executive summaries, job search portfolios. In contrast, WRIT 3562W (Technical and Professional Writing) focuses on writing for specific tasks and purposes.

Writ 3101W Writing Arguments
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Ross Jr, Donald
Description: Catalog Description: Classical appeals of ethos, logos, and pathos. Arguments of different styles and complexity. Logical fallacies, credibility issues. Using primary/secondary research. Readings may include essays on social policies/problems. Writing Arguments is an advanced composition course for upper-division students in any major. An argument is where you take a stand or make a claim about a topic and then back it up with facts, research, opinions, and reasons. The course will help you better understand the ways your arguments are put together and how yours can be made more interesting and effective. You will use what you already know and what you read and learn about your topics so that you know enough to write with confidence. We will first define the major features of arguments: appeal to your audience, how you present yourself, and the structure and organization of your papers. Through close analysis of example and practice you will appreciate how you can control those variables. After some background work, the course will focus on three progressively longer and more difficult papers. * Informed opinion ? You will argue for your position on an interesting topic with backing from your knowledge and experience complemented with what you acquire through interviews and direct observation. * Public opinion ? Narrow a topic on a current national or state issue so the result will fit in two op-ed articles of about 4 pages each. Then you will read widely to find out what facts and opinions experts and amateurs bring to the topic. * Academic ? Identify an important and interesting question that scientists, scholars, or critics in your major discipline have written about. Read and analyze some the key articles or book chapters for their audience, the writers? presentation, and structure. Then use those sources to write an academic paper in which you take a position on the question and back it up with your research. Contact Professor Donald Ross at rossj001@umn.edu for more information about this course.

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: Slater, Jarron Benjamin
Description: Student may contact the instructor or department for information.

Writ 3152W Writing on Issues of Science and Technology
A-F only, 4 credit(s);
Instructor: Thomas-Pollei, Kimberly A
Description: Student may contact the instructor or department for information.

Writ 3221W Communication Modes and Methods
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Graff, Richard J
Description: Surveys the field of communication theory. Major topic areas include theories of language and non-verbal communication, models of relational communication, and reflections on differences between older and newer media or modes of communication (e.g., speaking vs. writing; conventional print vs. digital text). In addition to introducing the theories, the course seeks to develop competencies in evaluating and applying them in the analysis of communication in various contexts including face-to-face conversations, ongoing interpersonal relationships, and digitally mediated interactions.
Style: 40% Lecture, 50% Discussion, 10% Small Group Activities.
Grading: 75% reports/papers, 15% quizzes, 10% class participation.

Writ 3257 Technical and Professional Presentations
OPT No Aud, 3 credit(s);
Instructor: STAFF
Description: WRIT 3257 is an advanced oral presentation course designed to further develop your public speaking skills. Specifically, the class focuses on communication theories and techniques for delivering effective, professional-quality presentations on scientific and technical topics. This course is designed to foster the critical and technical skills you will need to be an effective, efficient communicator in your chosen field of study and/or future career. The communication of specialized or technical information of a particular discipline presents special challenges. So, in addition to learning relevant principles of rhetoric, characteristics of different speech genres, and the steps of speech preparation, you will gain an understanding of your role as a conduit between technical, discipline-specific knowledge and your audience.

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: Horvath, Barbara Ann  
Description: In this course, students will increase their understanding of how language works and will learn to make choices about language, style, and punctuation to create messages that are clear, concise, and useful. The course emphasizes scientific and technical communication, but the skills learned can be applied to any communication situation. The emphasis in the course will be on creating documents that work for the people who will use them. Students will not only polish their grammar and punctuation skills, but they will also learn how to explain and justify changes they make in documents to the writers of those documents. Moreover, students will work with already created documents that need those editing skills to make the documents comprehensible and useful. Students will learn how to edit paper copy as well as electronic copy.  
Style: 25% Lecture, 25% Discussion, 25% Demonstration, 25% Web Based.  
Grading: 9% mid exam, 10% final exam, 28% special projects, 33% written homework, 20% class participation.

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 3562W Technical and Professional Writing  
A-F only, 4 credit(s); Meets CLE req of Writing Intensive  
Instructor: Holt, Sheryl Lynn  
Description: Upper division writing intensive course that includes written and oral communication in professional settings. The course includes analyzing audiences, gathering research, and critical analysis. Students will draft, test, revise, and present findings to specific professional audiences. This section is reserved for non-native speakers of English with additional support from the instructor.  
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: Kays, Trent M  
Description: Student may contact the instructor or department for information.

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: Lindgren, Chris  
Description: Student may contact the instructor or department for information.
Writ 3671 Visual Rhetoric and Document Design
A-F only, 3 credit(s);
Instructor: Clayson, Ashley
Description: Student may contact the instructor or department for information.

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.
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%

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 Technical Writing and Communication
A-F only, 3 credit(s);
Instructor: Horvath, Barbara Ann
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 4573W Writing Proposals and Grant Management
A-F only, 3 credit(s); Meets CLE req of Writing Intensive
Instructor: Thomas-Pollei, Kimberly A
Description: This course will teach a systematic method for grant seeking and proposal writing. Each student will learn how to research funding sources, how to write a letter of intent or pre-proposal, how to write a proposal that follows a sponsor's guidelines, how to compile a complete proposal package, and how to submit a proposal package to a sponsor. The course will stress the logic of the proposal, the kinds of appeals and arguments you can make, how to build your credibility with sponsors, how to identify and incorporate your competitive advantages, and how to determine what different readers are looking for in your proposal.
Style: 35% Lecture, 25% Discussion, 10% Small Group Activities, 10% Student Presentation, 5% Guest Speakers, 5% Web Based, 10% Service Learning.

Writ 4662W Writing With Digital Technologies
A-F only, 4 credit(s); Meets CLE req of Writing Intensive
Instructor: Duin, Ann Hill  
Description: Creating multimedia internet documents for interactivity and multiple uses. Includes design projects and practice with apps, mark-up language, content management systems, video, and social media.

Writ 4664W Science Writing for Popular Audiences  
A-F only, 3 credit(s); Meets CLE req of Writing Intensive  
Instructor: Logie, John  
Description: This course will center on our collective investigations into the rhetorical strategies underpinning effective scientific writing for lay audiences. Our ultimate goal will be to produce writing that incorporates and extends the best practices we identify during these investigations. Readings will include essays and articles by demonstrably successful science writers and field-specific exemplary articles identified by members of the class. We also will critically examine a recent guide to working in science writing. These readings will be paired with a series of writing assignments which will encourage students to deepen their understandings of their chosen fields’ discursive practices, and to determine how best to re-fashion field-specific discourses in ways which make them available and accessible for broader reading publics.

Writ 4995 Senior Project  
A-F only, 1 credit(s);  
Instructor: STAFF  
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 taking 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: Lazaraton, Anne  
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
Writ 5531 Introduction to Writing Theory and Pedagogy
A-F only, 3 credit(s);
Instructor: Bruch Jr, Patrick Leonard
Description: Pedagogical philosophy/methodology in composition, primarily first-year writing. Introduction to theories underlying teaching/tutoring with technology.

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 8011 Research Methods in Writing Studies and Technical Communication
A-F only, 3 credit(s);
Instructor: Haas, Christina
Description: Student may contact the instructor or department for information.

A-F only, 3 credit(s), max credits 12, 4 completions allowed;
Instructor: Schuster, Mary Lay
Description: This seminar explores how the body is configured in legal decisions, public policy debates, and funding and acceptance of medical research and treatment. In particular, we will look at how attitudes toward male and female bodies influence social myths and criminal categorization of domestic violence; how reproductive technologies symbolically divide or unite the maternal body and the fetal body; and how the body and parts of the body become symbols or texts for public and professional discussions of medical research and procedures. The course begins with foundational reading and discussion from the interdisciplinary work on how bodies are defined and marked, from HIV/AIDS tattoos to proposed mandatory HPV vaccination to human rights abuses in maquiladoras to definitions of disability and finally to social movements such as animal rights and environmental ethics. One part of the seminar deals with aspects of domestic violence, including the roles of prosecutors, judges, and the court system in dealing with the problem; the part of emotion and gender myths in criminal law; the recent controversies about sex offender legislation; and the language and principles articulated in historical and current court cases. Another part of the seminar deals with controversies in reproduction, from surrogates to breastfeeding to infertility treatment to homebirth and finally to unplanned pregnancies as portrayed in current films, such as Juno and Knocked Up. The final aspect of the seminar focuses on body debate in medical research and procedures, such as stem cell research, genetic counseling, chemical exposure in fetuses, and historical and current eugenics. Graduate students from all disciplinary areas are welcome. Students will have an opportunity to work on a project of interest. For more information, contact Professor Mary Schuster, mmlay@umn.edu.

Writ 8792 Independent Study, Reading, and Research
S-N only, 1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Ross Jr, Donald
Description: Student may contact the instructor or department for information.

Writ 8794 Directed Research
S-N only, 1-4 credit(s), max credits 12, 12 completions allowed;
Instructor: Ross Jr, Donald
Description: Student may contact the instructor or department for information.

Youth Development and Research 190 Peters Hall

YoSt 1001 Seeing Youth, Thinking Youth: Media, Popular Media, and Scholarship
3 credit(s);
Instructor: STAFF
Description: Student may contact the instructor or department for information.

YoSt 2101 Urban Youth and Youth Issues
4 credit(s); Meets CLE req of Diversity and Soc Justice US
Instructor: STAFF
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.

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;
Instructor: STAFF
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 anatomy, 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 3032 Adolescent and Youth Development for Youthworkers
4 credit(s);1001 or 2001 or 2002W or 2101, [any Psych or CPsy course]Credit will not be granted if credit has been received for: YOST 5032;
Instructor: VeLure Roholt,Ross Ronald
Description: Student may contact the instructor or department for information.

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: 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
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 4322 Work with Youth: Families
2 credit(s); 1001 or 2002W or instr consent
Credit will not be granted if credit has been received for: YOST 5322;
Instructor: Oliver-Tebben,Jessica Elda
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 4402 Youth Policy: Enhancing Healthy Development in Everyday Life
4 credit(s); [1001, 2002W] or instr consent
Credit will not be granted if credit has been received for: YOST 5402;
Instructor: Baizerman,Michael Leon
Description: Student may contact the instructor or department for information.

YoSt 5032 Adolescent and Youth Development for Youthworkers
4 credit(s); [1001 or 2001 or 2002W or 2101], [any Psych or CPsy course]
Credit will not be granted if credit has been received for: YOST 3032;
Instructor: VeLure Roholt,Ross Ronald
Description: The purpose of this course is to prepare youthwork students and youthwork professionals, at a beginning level, to use developmental theory to inform their work with young people. The course provides an opportunity for youthworkers to understand the power and importance of the theories of human development and to reflect on their application in everyday youthwork practice. Students will explore theories of adolescent and youth development and read case studies about the everyday lives of young people to practice applying the theory.
Style: 10% Film/Video, 60% Discussion, 20% Small Group Activities, 10% Student Presentation.
Grading: 15% mid exam, 50% reports/papers, 5% attendance, 10% in-class presentation, 10% class participation.

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 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 5322 Work With Youth: Families
2 credit(s);1001 or 2002W or instr consent Credit will not be granted if credit has been received for: YOST 4322;
Instructor: Oliver-Tebben,Jessica Elda
Description: Student may contact the instructor or department for information.

YoSt 5402 Youth Policy: Enhancing Healthy Development in Everyday Life
4 credit(s);[2001, one course each in [FSoS, PolSci, Soc]] or instr consent Credit will not be granted if credit has been received for: YOST 4402;
Instructor: Baizerman,Michael Leon
Description: Student may contact the instructor or department for information.

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: Skuza 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 5960 Seminar in Youth Development Leadership
S-N only, 1-4 credit(s), max credits 4, 4 completions allowed;
Instructor: VeLure Roholt,Ross Ronald
Description: Student may contact the instructor or department for information.

YoSt 5962 Leadership Field Experience: Youth Development
S-N only, 4 credit(s);
Instructor: VeLure Roholt,Ross Ronald
Description: Student may contact the instructor or department for information.

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.