

AFAM 114. Here, There, and Everywhere: African Diaspora Formations in and Beyond The Atlantic

"Diaspora" refers to the dispersion of a people with a common origin from an ancestral or established homeland. This course considers historical conditions in the formation of African diasporic communities in and beyond the Americas, including: (a) reasons for dispersal, (b) processes creating new identities in "host countries," and (c) issues of nostalgia and belonging. Additional topics may include: survival and expression of elements of African cultural heritage; African diaspora social and political movements; social, cultural and political crosscurrents and population movements within the African diaspora; and diasporic peoples' influences exerted globally or upon the African homeland itself. *6 credits, SS; SI, IS, Fall—L. Beck*

AFAM 220. The Souls of Black Folks: African Diaspora Intellectual Thinkers & Questions of Black Identity and Belonging

This course surveys the writings of African diaspora people as they have historically grappled with the question of what it means to be black. We will insert black intellectual voices into the canon of important sociological, anthropological, and philosophical debates on issues of race, gender, diaspora, and belonging. Along with exploring and contextualizing the responses and dialogues of black thinkers such as Anna Julia Cooper, W.E.B. Du Bois, and Franz Fanon, we will also engage with more contemporary articulations of black intellectual thought through an engagement with the work of scholars including Audre Lorde, Alice Walker, and Kobena Mercer. *6 credits, SS; SI, IS, Winter—L. Beck*

AMST 100. The Long View: History and American Culture

As the pace of American life seems to move ever faster, who has time for the past? Yet without the past there would be neither present nor future, for only history explains the origins of the present. It is history's long view that will be the heart of this course. Contemporary American questions (is America a Christian nation?, is higher education worth it?, do people deserve to go bankrupt?, what's so American about Mom and apple pie?) only make sense in their historical perspective, which replaces simplistic answers with deeper understanding. *6 credits, AI, WR1, Fall—S. Zabin*

AMST 214. Music in the 1970s

Frequently derided as a nadir of musical culture, the 1970s were a period of extraordinary musical creativity and change. In addition to the flowering of funk, soft rock, heavy metal, disco, and punk, the era also saw debates over authenticity in country music, experimentation with minimalism, jazz, and technology in classical music, and the beginnings of a "world music" market. We'll approach this rich decade with deliberate interdisciplinarity, exploring the varied music and musical cultures through focused listening, analysis of period video and historic documents, and through the work of scholars from a variety of disciplines. *6 credits, AL, WR; SI, WR2, Winter—M. Russell*

AMST 225. Beauty and Race in America

In this class we consider the construction of American beauty historically, examining the way whiteness intersects with beauty to produce a dominant model that marginalizes women of color. We study how communities of color follow, refuse, or revise these beauty ideals through literature. We explore events like the beauty pageant, material culture such as cosmetics, places like the beauty salon, and body work like cosmetic surgery to understand how beauty is produced and negotiated. *6 credits, ND, WR; HI, WR2, IDS, Offered in alternate years, Spring—A. Estill*

ARTH 171. History of Photography

This course covers nineteenth and twentieth century photography from its origins to the present. It will consider formal innovations in the medium, the role of photography in society, and the place of photography in the fine arts. *6 credits, AL; LA, Offered in alternate years, Fall—B. Jarman*

ARTH 307. Rome: The Art of Michelangelo and Caravaggio

Early Modern Rome flourished as a center of art and architecture, reviving its position in classical antiquity. This course is organized around three major artists, Michelangelo, Caravaggio, and Bernini, and secondarily Annibale Carracci and Orazio and Artemisia Gentileschi in Rome, and such foreign artists as Rubens, Velazquez, and Poussin. Recurring themes will include the mechanisms of patronage, concepts of the naturalistic, artistic self-definition, church renewal, the urban landscape, and the interdependence of architecture and society. The major question throughout the term: What difference does it make that this art was produced in Rome? Prerequisite: Any course in art history at Carleton. *6 credits, AL, WR; LA, WR2, IS, Fall—A. Kettering*

ARTS 141. Experimental Photography

In this course we will explore the rich history of photography's experimental development through the use of light and chemistry. Our focus will be on black and white darkroom experimentation and color scanning and digital printing. Demonstrations will cover a wide range of materials and techniques such as the making of pin hole cameras, paper negatives, photograms, photomontages, and the use of toning, solarization and liquid emulsion on wood and glass. Students will create a portfolio and recipe book of their experimental investigations. *6 credits, AL; ARP, Winter, Spring—L. Rossi*

ARTS 212. Studio Art Seminar in the South Pacific: Mixed Media Drawing

This course involves directed drawing

in bound sketch books, using a variety of drawing media, and requires on-going, self-directed drawing in visual journals. Subjects will include landscape, figure, portraits, and nature study. The course will require some hiking in rugged areas. Prerequisite: Studio Art 110 or 113. *6 credits, AL; ARP, Offered in alternate years, Winter—F. Hagstrom*

ARTS 234. The Figure in Clay This course is an introduction to the figurative and narrative potential of clay as a sculptural medium. Through hands-on demonstrations, lectures, readings, and assignments students will develop an understanding of both contemporary and historical approaches to forming the human figure in clay. The relationship artists have with the human body is complex and has been the subject of religious, philosophical and personal investigation for centuries. This course will analyze this relationship while developing technical skills in construction and firing techniques specific to ceramics. Prerequisite: ARTS 110, 113, or 122. *6 credits, AL; ARP, Spring—K. Connoles*

ARTS 274. Studio Art Seminar in the South Pacific: Printmaking This course provides instruction in the techniques of intaglio and relief printmaking. Students will work in printmaking media on directed projects, exploring the story-like nature of visual art. Participation in critiques and group assignments as well as individually directed work will be required. Prerequisite: Studio Art 110 or 113. *6 credits, AL; ARP, Offered in alternate years, Winter—F. Hagstrom*

ARTS 275. Studio Art Seminar in the South Pacific: Physical & Cultural Environment of Australia & New Zealand This course examines how Australia and New Zealand have changed since colonization. Students study the physical and environmental beginnings of these countries and learn about the history of their indigenous people, noting how the physical landscape has been changed through agriculture, mining, and the importation of non-native species. This course will include readings, meetings with visiting artists and lecturers, and visits to cultural centers. *6 credits, S/CR/NC, SS, RAD; LA, IS, Offered in alternate years, Winter—F. Hagstrom*

ASTR 127. Topics in Modern Astrophysics Special topics in modern astrophysics will be explored in order to understand the physical processes at work in a variety of cosmic settings. Possible topics include the solar weather and its impact on Earth, extra-solar planets, black holes, dark matter, gravitational lensing, large-scale structures and dark energy in an accelerating universe. Prerequisite: Astronomy 110 or 100 or Physics 131,132,141 or 142. *6 credits, MS, WR; NE, WR2, QRE, Spring—C. Blaha*

BIOL 221. Ecosystem Ecology This course examines major ecosystems on Earth, including terrestrial, wetland, lake, river, estuarine, and marine systems. Topics include the two major themes of energy flow and production and decomposition, microbial ecology and nutrient transformations, element cycles, ecosystems as a component of the Earth System, and global change. Current applied issues are emphasized as case studies, including clear cutting, rising atmospheric CO₂, eutrophication of aquatic systems, acid rain, wetland delineation, and biodiversity effects on ecosystems. Prerequisite: Biology 126 and one of the following: Biology 125, Geology 110, Chemistry 123 or 128. *6 credits, MS; NE, QRE, Fall—Becknell*

BIOL 230. Introduction to Pharmacology This course will focus on the principles that underlie the effects of drugs on the human body. This course will begin with a discussion of receptor theory. We will then explore concepts of signal transduction with a focus on signaling pathways including, but not limited to, signaling by G-protein coupled receptors and receptor tyrosine kinases. Finally, we will discuss classes of drugs and their mechanisms of action in the treatment of various diseases and disorders. Prerequisite: Biology 125, 126, Chemistry 233. *6 credits, MS; NE, QRE, Winter—S. Guerrier*

BIOL 302. Methods of Teaching Science This course will explore teaching methods for the life and physical sciences in grades 5-12. Curricular materials and active learning labs will be discussed and developed. In addition, time outside of class will be spent observing and teaching in local science classrooms. Will not count toward a biology major. Prerequisite: Permission of instructor. *6 credits, ND; NE, Winter—D. Walser-Kuntz*

BIOL 358. Evolution of Sex and Sexes The origin and maintenance of sexual reproduction remains a central enigma in evolutionary biology. This seminar course will explore contemporary primary literature that addresses a variety of evolutionary questions about the nature of sex and sexes. Why is sexual reproduction usually favored over asexual alternatives? Why are there no more than two sexes? What determines the characteristics of females and males within diverse species? How did sex chromosomes evolve and why do some species lack them? Prerequisite: Biology 125 and 126. *6 credits, MS; NE, QRE, Offered in alternate years, Fall—M. McKone*

BIOL 371 Seminar on Human Dominated Ecosystems Human dominated ecosystems occur wherever human activities become the prevailing force in ecological patterns and processes, including everything from a clear-cut tropical forest to your backyard. It also includes remote areas changing because of human alteration of nutrient cycles and the climate. As human population and impacts grow, so does the need to understand how ecosystems respond. This course will use recent scientific literature to explore this new field of ecology, the study of human dominated ecosystems. Topics

include the ecology of cities, decimated ecosystems, ecology of the post-war landscape, preservation and restoration under a changing climate, and designed ecosystem. Prerequisites: BIOL 125, 126 and one upper-level ecology course (BIOL 210, 221, 236 or 352) or permission of the instructor. *6 credits, MS, NE, QRE, Spring—J. Becknell*

BIOL 375 Natural History of Minnesota This course will explore the ecology of the ecosystems and organisms of Minnesota - including lakes and rivers, grasslands, and deciduous and boreal forest - through the reading and analysis of the primary literature and independent field research projects. Students will gain skills in species identification, experimental design, scientific writing and presentation. In addition to scheduled class time, this course includes two weekend field trips. Prerequisites: BIOL 125, BIOL 126, and one upper-level course in ecology (BIOL 221, 236, 238, or 352) *6 credits, MS, QRE, Spring—D. Hernandez*

BIOL 399. Critical Reading and Analysis of Primary Literature Guided instruction in reading and interpretation of contemporary primary literature in Biology. Prerequisite: Completion of Biology 125, 126 and three upper-level biology courses. Concurrent registration in BIOL 400 required. *3 credits, S/CR/NC, ND; NE, Fall—Staff*

CAMS 228. Avant-Garde Film & Video from Dada to the Beats This class charts avant-garde film, photography and design from Salvadore Dali's surrealist cinema in the 1920's to the flowering of Beat culture in the 1950's. Key monuments are read against the progression of the art historical styles and "-isms" that informed them. We will take an extended look at Beat Culture in the 1950's as a context for the emergence of the American avant-garde. Expect to view rare original prints at the Walker Art Center and make your own experimental film. *6 credits, AL; LA, Offered in alternate years, Fall—J. Schott*

CAMS 232. Cinema Directors: Tarkovsky This course addresses the legacy of Russian film director and cult figure Andrei Tarkovsky, his contribution to the revival of Russian cinema and film theory, and his influence on other filmmakers in Russia and around the world. Readings will focus on Tarkovsky's own writing about film and art. Close analysis of the films (*Ivan's Childhood, Andrei Rublev, Mirror, Stalker, Nostalghia, Sacrifice*) will be supplemented by consideration of Tarkovsky's sources from Leonardo DaVinci to his own father, poet Arsenii Tarkovsky. Prerequisite: None. *3 credits, AL; LA, IS, Offered in alternate years, Winter—D. Nemec Ignashev*

CAMS 233. The French Cinema In this overview of the major trends in French cinema, we will consider the intersections of the political, social, cultural, and artistic dimensions of films by a number of different French filmmakers. Discussions will focus on such questions as the following: In what ways has French cinema mobilized (or undermined) national myths? What role has film played in mediating the French historical memory? How have French films dealt with the nation's (colonial) others? Course materials will incorporate critical theory and cultural readings. Taught in English with all films subtitled. *6 credits, AL; LA, IS, Offered in alternate years, Winter—D. Strand*

CAMS 237. Cinemas & Contexts: Russian Film The Russian school of filmmaking developed in a socio-political context that indelibly marked its production. Fortunately, the Russian school's achievements have exceeded the limitations of time, politics, and national boundaries, to this day influencing filmmakers around the world. This course examines major moments in Russian cinema history. Readings and brief lectures situate films in their historical and political contexts; discussion and close analysis explore technological innovation and the theories underlying them. The survey concludes with consideration of the Russian school's significance particularly for emerging cinemas in Cuba, China, Africa, and post-Soviet Central Asia. *6 credits, AL; LA, IS, Offered in alternate years, Fall—D. Nemec Ignashev*

CAMS 265. Sound Design This course examines the theories and techniques of sound design for film and video. Students will learn the basics of audio recording, sound editing and multi-track sound design specifically for the moving image. The goal of the course is a greater understanding of the practices and concepts associated with soundtrack development through projects using recording equipment and the digital audio workstation for editing and mixing. *6 credits, AL; ARP, Offered in alternate years, Winter—J. Beck*

CAMS 271. Fiction I Through a series of exercises students will explore the fundamentals of making fictional media, including framing, staging, camera movement, working with actors, traditional 3-act structure, and alternative approaches. Through course readings, screenings, and writing exercises, we will analyze how mood, tone, and themes are constructed through formal techniques. Group and individual exercises will develop diverse strategies for narrative construction and cinematic storytelling. The course will culminate in individual short fiction projects. Prerequisite: CAMS 111 or permission of instructor. *6 credits, AL; ARP, Offered in alternate years, Winter—L. Jimsen*

CAMS 278 Writing for Televison TV is a very specific, time-driven medium. Using examples from scripts and DVDs, students will learn how to write for an existing TV show, keeping in mind character consistency, pacing, tone, and compelling storylines. Students will also get a taste of what it's like to be part of a writing staff as the class itself creates an

episode from scratch. Topics such as creating the TV pilot, marketing, agents, managers, and more will be discussed. Finally, general storytelling tools such as creating better dialogue, developing fully-rounded characters, making scene work more exciting, etc., will also be addressed. Prerequisite: CAMS 110 or permission of the instructor. *6 credits, AL, ARP, Fall—M. Elyanow*

CAMS 286. Animation Animation will explore both traditional, handmade animation and computer-based animation software. The course will emphasize skills in observation, perception, and technique using both old and new technologies. Exercises will build skills in creating believable and cinematic locomotion, gesture, and characters in diverse media including drawing by hand on cards, software-based animation, and stop-motion. The final project gives students the opportunity to develop more advanced skills in one, or a combination, of the techniques covered in class to create a self-directed animation project. Prerequisite: CAMS 110, one CAMS 200-level studio production course, or permission of instructor. *6 credits, AL; ARP, Offered in alternate years, Fall—L. Jimsen*

CAMS 320. Sound Studies Topics Seminar This course presents the broader field of Sound Studies, its debates and issues. Drawing on a diverse set of interdisciplinary perspectives, the seminar explores the range of academic work on sound to examine the relationship between sound and listening, sound and perception, sound and memory, and sound and modern thought. Topics addressed include but are not limited to sound technologies and industries, acoustic perception, sound and image relations, sound in media, philosophies of listening, sound semiotics, speech and communication, voice and subject formation, sound art, the social history of noise, and hearing cultures. *6 credits, AL; LA, Offered in alternate years, Spring—J. Beck*

CAMS 370. Advanced Production Workshop Working in a variety of genres and technical formats, students design, test, and execute an in-depth, individual media project during the course of the term. Students are expected to work at advanced technical and conceptual levels to expand specific skills and aesthetics. Weekly class critiques will help students develop formal approaches, audio and visual language, and work flows specific to their projects. As students enter the production and post-production phases, further critiques will help them shape their material for the greatest, most precise expression. Students may enroll in this course multiple times. Prerequisite: Cinema and Media Studies 111 and at least one 200-level production course. *6 credits, AL; ARP, Spring—L. Jimsen*

CCST 275. I'm a Stranger Here Myself What do enculturation, tourism, culture shock, "going native," haptics, cross-cultural adjustment, and third culture kids have in common? How do intercultural transitions shape identity? What is intercultural competence? This course explores theories about intercultural contact and tests their usefulness by applying them to the analysis of world literature, case studies, and the visual arts, and by employing students' intercultural experiences as evidence. From individualized, self-reflective exercises to community-oriented group endeavors, our activities will promote new intercultural paradigms in the classroom and the wider community. Course designed for off-campus returnees, students who have lived abroad, or who have experienced being outsiders. *6 credits, ND, RAD; SI, IS, Winter—É. Pósfay*

CGSC 100. Evolution and Mind An introduction to issues in cognitive science and philosophy of mind focusing upon the importance of evolution theory for understanding the nature of the human mind. Central questions to be discussed include: the nature of Darwinian theory; the structure and function of human language; the evolution of human culture; modularity theories of human cognition; the evolution of morality. *6 credits, AI, WR1, Fall—R. Elveton*

CGSC 130. Learning Science: An Introduction to Cognitive Science Cognitive science is a multidisciplinary field of inquiry involving biology, computer science, linguistics, philosophy and psychology whose aim is to understand the nature of the human mind. This course will explore ways cognitive science informs our understanding of how people learn science. Specific topics will include problem solving, conceptual change, expert-novice differences, metacognition, motivation, and visualization in the context of learning and teaching science. *6 credits, SS, SI, Spring—S. Singer*

CHEM 233. Organic Chemistry I Theoretical aspects of carbon chemistry are examined with reference to structure-reactivity relationships, functional groups, stereochemistry, reaction mechanisms and spectroscopy. Laboratory work concentrates on modern techniques of organic chemistry, inquiry-based projects, and spectroscopic analysis. One laboratory per week. Prerequisite: Chemistry 123 or 128. *6 credits, MS; LS, QRE, Fall—D. Alberg, G. Hofmeister*

CHEM 324. Chemistry and Biology of Antibiotics This course will survey the mechanisms of antibiotic activity from a biochemical perspective, covering the major classes of antibiotics along with their respective biological targets using a combination of lecture and discussion of recent literature. We will also explore strategies for antibiotic discovery including combinatorial and rational approaches, as well as the molecular origins of the current crisis in antibiotic resistance. Prerequisite: Chemistry 234. *6 credits, MS; NE, QRE, Fall—C. Calderone*

CHEM 339. A Survey of Instrumentation for Chemical Analysis This laboratory course provides students with additional experience using instrumental methods for quantitative chemical analysis. Laboratory work will consist of four assigned experiments that use instrumental techniques such as liquid and gas chromatography, spectrophotometry and fluorometry, mass spectrometry, and voltammetry. In addition, these critical analytical instruments will be studied on a more theoretical level in order to fully understand their function. This laboratory course will conclude with an instrumental analysis project that will be researched and designed by each student. Prerequisite: Chemistry 230. *2 credits, ND; NE, QRE, Offered in alternate years, Winter—S. Drew*

CHEM 353. Organic Chemistry III The correlation of structure and reactivity in organic molecular systems is studied through the analysis of reaction mechanisms. Topics will include linear free energy relationships, isotope effects, and molecular orbital theory. We will use these theories to analyze reactions, such as pericyclic, enantioselective, and organometallic transformations. Prerequisite: Chemistry 234. Co-requisite: 301 or 343 or 344. *6 credits, MS; NE, QRE, Offered in alternate years, Winter—G. Hofmeister*

CHEM 359 Molecular Orbital Theory This course will focus on the construction and understanding of molecular orbital (MO) diagrams using symmetry and energy arguments. Conceptual constructs will be contrasted to computational output to support theoretical tenets. We will begin with the construction of the MO diagrams of small molecules and proceed to larger molecules culminating in dimers and asymmetric molecules using the Hoffmann Fragment Approach. Prerequisite: Chemistry 351 or consent of the instructor. *6 credits, MS, NE, Winter—M. Cass*

CLAS 100. The Hero with 1,000 Faces: From Homer to Hobbits This A&I seminar will consist of a critical examination of Joseph Campbell's "monomyth" of the heroic journey. We will consider several texts and films as expressions of the archetypal cycle of departure/adventure/return and how this narrative pattern is inflected through different historical periods and cultures. Texts include Homer's *Odyssey*, Apuleius' *The Golden Ass*, and Tolkien's *The Hobbit*, among others. *6 credits, AI, WR1, Fall—C. Zimmerman*

CLAS 119. Pompeii and the Cities of Vesuvius Pompeii and the other cities destroyed by Vesuvius are very different from other archaeological sites in terms of their destruction, excavation and preservation. This course aims to introduce students to the wealth of evidence from Pompeii that can be used to examine Roman urban life, but also to make them aware of the problems that affect our knowledge and interpretation of this evidence. Topics will include: the eruption of Vesuvius; history and urban development; architecture; domestic and public life; neighborhoods and villas; graffiti; entertainment; death and burial. We will also look at current conservation issues that affect the archaeological remains. *6 credits, HU; HI, IS, Spring—J. Berry*

CLAS 222. Nature and the Environment in the Ancient World As moderns, we often think of Nature as an ancient concept. But how old is our idea of the Natural exactly, and what did people think about the Environment before the advent of Environmentalism, Romanticism, and Christianity as prevailing modes of Western thought? This course will explore how Greeks and Romans conceived of and engaged with their natural environment(s), with special attention to the ways in which ancient ideas differ from modern ones. Using textual and material sources, we will examine ancient attitudes towards Nature and the Environment through literature, philosophy, religion, politics, science, etc. *6 credits, HU, WR, RAD; HI, WR2, IS, QRE, Spring—C. Polt*

CLAS 230. Greeks Go Global: the Hellenistic World This course examines the transformation of the Greek world from the classical city-state to the multicultural Hellenistic monarchy. The first part of the course examines the developments of the fourth century BCE, including classical philosophy, politics, and art; the rise of Macedon; Alexander the Great; and the wars of Alexander's successors. The second part explores the philosophical, cultural, and scientific world of Ptolemaic Egypt. The course focuses throughout on how the Greeks came to grips with a rapidly changing world in which the individual was subordinated to the absolute and impersonal power of kings. *6 credits, HU; HI, IS, QRE, Winter—K. Steed*

CLAS 231. The Roman Principate This class is an introduction to the history of Rome from the accession of the first Roman emperor Augustus in 31 BCE to the death of Severus Alexander in 235 CE. It examines the political and military events of the period (including the reigns of individual emperors like Augustus, Nero and Hadrian), as well as themes such as the nature of imperial power and the image of the emperor, social and economic structures, the nature and administration of empire and the relationship between central power and local cultures. Based largely on primary source readings and appropriate visual/material evidence. *6 credits, HU; HI, IS, Spring—N. Pollard*

CS 204. Software Design It's easy to write a mediocre computer program, and lots of people do it. Good programs are quite a bit harder to write, and are correspondingly less common. In this course, we will study techniques, tools, and habits that will improve your chances of writing good software. While working on several medium-sized programming projects, we will investigate code construction techniques, debugging and profiling tools, testing methodologies, UML, principles of

object-oriented design, design patterns, and user interface design. Prerequisite: Computer Science 201 or consent of the instructor. *6 credits, MS; FSR, Spring—A. Csizmar Dalal*

CS 231. Computer and Network Security Hackers, phishers, and spammers—at best they annoy us, at worst they disrupt communication systems, steal identities, bring down corporations, and compromise sensitive systems. In this course, we'll study various aspects of computer and network security, focusing mainly on the technical aspects as well as the social and cultural costs of providing (or not providing) security. Topics include cryptography, authentication and identification schemes, intrusion detection, viruses and worms, spam prevention, firewalls, denial of service, electronic commerce, privacy, and usability. Prerequisite: Computer Science 201 or 202 or 208. *6 credits, MS; FSR, Offered in alternate years, Winter—A. Csizmar Dalal*

CS 251. Programming Language Design and Implementation What makes a programming language like "Python" or like "Java?" This course will look past superficial properties (like indentation) and into the soul of programming languages. We will explore a variety of topics in programming language construction and design: syntax and semantics, mechanisms for parameter passing, typing, scoping, and control structures. Students will expand their programming experience to include other programming paradigms, including functional languages like Scheme and ML. Prerequisite: Computer Science 201 or permission of instructor. *6 credits, MS; FSR, Fall—L. Effinger-Dean*

CS 254. Computability and Complexity An introduction to the theory of computation. What problems can and cannot be solved efficiently by computers? What problems cannot be solved by computers, period? Topics include formal models of computation, including finite-state automata, pushdown automata, and Turing machines; formal languages, including regular expressions and context-free grammars; computability and uncomputability; and computational complexity, particularly NP-completeness. Prerequisite: Either Computer Science 202 or Mathematics 236. *6 credits, MS; FSR, Spring—L. Effinger-Dean*

CS 322. Natural Language Processing Computers are poor conversationalists, despite decades of attempts to change that fact. This course will provide an overview of the computational techniques developed in the attempt to enable computers to interpret and respond appropriately to ideas expressed using natural languages (such as English or French) as opposed to formal languages (such as C++ or Lisp). Topics in this course will include parsing, semantic analysis, machine translation, dialogue systems, and statistical methods in speech recognition. Prerequisite: Computer Science 201 and 202 or permission of the instructor. *6 credits, MS; FSR, QRE, Offered in alternate years, Fall—D. Liben-Nowell*

CS 348. Parallel and Distributed Computing As multi-core machines become more prevalent, different programming paradigms have emerged for harnessing extra processors for better performance. This course explores parallel computation (programs that run on more than one core) as well as the related problem of distributed computation (programs that run on more than one machine). In particular, we will explore the two major paradigms for parallel programming, shared-memory multi-threading and message-passing, and the advantages and disadvantages of each. Other possible topics include synchronization mechanisms, debugging concurrent programs, fork/join parallelism, the theory of parallelism and concurrency, parallel algorithms, cloud computing, Map/Reduce, GPU programming, transactional memory, and memory models. Prerequisite: Computer Science 201. *6 credits, MS; FSR, Winter—L. Effinger-Dean*

CS 361. Evolutionary Computing and Artificial Life An introduction to evolutionary computation and artificial life, with a special emphasis on the two way flow of ideas between evolutionary biology and computer science. Topics will include the basic principles of biological evolution, experimental evolution techniques, and the application of evolutionary computation principles to solve real problems. All students will be expected to complete and present a term project exploring an open question in evolutionary computation. Prerequisite: Computer Science 201 or consent of the instructor. *6 credits, MS; FSR, Offered in alternate years, Spring—S. Goings*

CS 399. Senior Seminar As part of their senior capstone experience, majors will work together in teams (typically four to seven students per team) on faculty-specified topics to design and implement the first stage of a project. Required of all senior majors. Prerequisite: Senior standing. Students are strongly encouraged to complete Computer Science 204 and 252 before starting Computer Science 399. *3 credits, S/CR/NC, ND; NE, Fall—Staff*

ECON 100. Catastrophe Catastrophes have the potential to destroy large parts of life on earth. Such catastrophes as the possibility of a pandemic, a collision with an asteroid or irreversible climate change. We will examine several catastrophes from an interdisciplinary perspective that will meld the insights of lawyers, economists, psychologists and other social scientists with those of researchers in the physical sciences. We will consider why the public and policymakers often ignore such risks and what concrete ways of response are possible. What will they cost in terms of national sovereignty or civil liberties. *6 credits, AI, WR1, Fall—M. Paas*

ECON 224. Cambridge Program: Economics of Multinational Enterprises This course will provide a brief introduction to the economics of multinational enterprises (MNE). We will examine the economic theory of MNEs, with a particular emphasis on understanding when a MNE is likely to be a viable form of economic organization. We will also discuss the interaction between MNEs and their host countries. Finally, we will use a series of business school cases to explore the interaction between economic theory and the actual operations of MNEs. In addition to classroom work, we will take several trips to London to visit businesses which will give us further opportunities to examine the interaction between economic theory and the real world of business. Prerequisite: Economics 110 and 111. *3 credits, SS; SI, Summer—M. Hemesath*

ECON 244. Analysis of Microeconomic Development Models This course will focus on critically analyzing the appropriateness of modern microeconomic development models in the context of Bangladesh. Students exposed to various on-site visits and lectures in Bangladesh during the winter break will be required to research, write and present their views on the reliability of different model assumptions and implications they studied in Economics 240. *6 credits, SS, WR; SI, WR2, QRE, IS, Winter – M. Bhuiyan*

ECON 272. Economics, Property Rights and Institutions for Natural Resources and the Environment This course examines the economic, historical, legal and institutional roots of the present-day environmental crisis, with the main, but not exclusive, focus on the United States. Topics covered include land and timber policy, minerals extraction, grazing rights, fisheries management, energy use and production, agriculture, wildlife management, endangered species protection, and rain forest preservation. Prerequisite: Economics 110 and 111. *6 credits, SS, WR; SI, WR2, QRE, Spring—M. Kanazawa*

ECON 276. Money and Banking This course examines the role of money and monetary institutions in determination of income, employment, and prices in the domestic and world economies. It also examines the role of commercial banking and financial markets in a market-based economy. Prerequisite: Economics 110 and 111. *6 credits, SS; SI, QRE, Fall—B. Wambheim*

ECON 284. Economic Development in Japan Japan's economic development is examined in four broad time periods: the social and economic preconditions for growth during the Tokugawa period, the rapid economic development of the Meiji and Taisho eras, the so-called "Japanese economic miracle" of the post-WWII period, and the extended economic malaise of the last 20 years. Emphasis is given to Japan's rapid growth in the post-war period, its more recent economic malaise, the relevance of economic events in Japan to the rise of the Chinese economy, and a comparison of the Japanese and American responses to asset bubbles and their collapse in the last decade. Prerequisite: Economics 110 and 111. *6 credits, SS; SI, IS, QRE, Fall—B. Dalgaard*

ECON 329. Econometrics This course is an introduction to the statistical methods used by economists to test hypotheses and to study and quantify economic relationships. The course emphasizes both statistical theory and practical application through analysis of economic data sets using statistical software. Topics include two-variable and multiple regression, interval estimation and hypothesis testing, discrete and continuous structural change, parameter restrictions, model construction, heteroscedasticity, autocorrelation, and multicollinearity. Prerequisite: Mathematics 111 (or its equivalent) and either Mathematics 215 or 275 and Economics 110 and 111. *6 credits, SS; SI, QRE, Fall—M. Kanazawa*

ECON 395. Advanced Topics: Economics of Land, Water and the Environment This seminar examines a wide range of issues relating to the economics of natural resources and how their use affects the environment. Issues include not only narrow economic allocation decisions and the policy implications, but also larger issues of property rights definition, contractual arrangement, public choice, and institutional development. New approaches in these areas have proven highly fruitful when applied to a variety of natural resources including water, farmlands, minerals, oil, timber, grazing land and wildlife. Prerequisite: Economics 329 (332), 330, and 331 or concurrent enrollment in 329. *6 credits, SS, WR; SI, WR2, QRE, Fall—M. Kanazawa*

ECON 395. Advanced Topics in Economic Development Students will be exposed to theoretical models of economic development both from a micro and a macro perspective. Econometric models including probits, logits, instrumental variables, ordered probits, and ordered logits will be applied to micro-level data to study theoretical models dealing with migration, poverty, inequality, nutrition, development program evaluation, and decision making in the context of developing countries. Economic development will also be explored from the perspective of the "growth literature" where macro level panel data will be explored using fixed-effects and random-effects panel regression models. Prerequisite: Economics 329 (332), 330, and 331 or concurrent enrollment in 329. *6 credits, SS, WR; SI, WR2, IS, QRE, Fall—M. Bhuiyan*

ECON 395. Advanced Topics in International Macroeconomics This course focuses on topics and empirical puzzles in International Macroeconomics. It covers exchange rate determination and forecasting, the effect of monetary and fiscal

policies in open economies, exchange rate crises, failures of purchasing power parity and law of one price, the so called "consumption correlations puzzle" and the home bias in international investment. A basic theoretical dynamic model of a small open economy is introduced, as well as time series econometric methods that are commonly used by empirical researchers in the field. Prerequisite: Economics 329 (or 332), 330, and 331 or concurrent enrollment in 329. *6 credits, SS, WR; SI, WR2, IS, QRE, Fall—R. Szulga*

EDUC 335. Cultural Capital and Carleton: Educational Research In our data-driven world, individuals who are able to critically read and produce quality research are in powerful positions to effect educational change. What changes have the greatest promise? Once change is implemented, does it actually live up to that promise? This course will provide an introductory experience to being an educational researcher. Students will distinguish cases in which qualitative or quantitative research methods are warranted; examine the literature and identify gaps; and prepare a research plan. The topic of study will be the influence of cultural capital in the ways Carleton students study or choose courses of study. Prerequisite: One Educational Studies course or permission of the instructor. *6 credits, SS: IDS, QRE, Spring—A. Nixon*

ENGL 100. The Questing Hero This class explores the enduring genre of romance. Chivalric romance has given us the familiar image of the wandering knight in search of adventure, but has also generated the modern novel and many forms of popular cinema, including westerns and sports films. As we read examples of romance from the Middle Ages up to the present, we will consider what has made this genre so durable, flexible, and popular. And we will consider how the narrative model of the questing knight continues to influence contemporary stories of trial, maturation, and success. *6 credits, AI, WR1, Fall—G. Shuffelton*

ENGL 100. Visions of the Waste Land In his great post-World War I poem, T. S. Eliot described the waste land of western civilization as "a heap of broken images." We will explore how the writers of the first half of the twentieth-century invented ways of reshaping those broken images into a new literary art that has come to be called Modernism. Writers studied will likely include Yeats, Joyce, Woolf, and Faulkner. Attention will be given to the writing of literary critical papers, and to supplying students with the foundational tools for more advanced literary study. *6 credits, AI, WR1, Fall—G. Smith*

ENGL 100. Writing for Success in College: Reflection, Exploration, Rhetoric Writing makes thinking visible. In this course, students will conduct research projects that involve posing a problem, collecting data (in many forms), choosing what data are relevant, and making a case for action. Readings will range from the Western rhetorical tradition to current events. All students will participate in peer review and oral presentations. *6 credits, AI, WR1, QRE, Fall—C. Rutz*

ENGL 100. Spirit of Place We will consider a range of texts (in fiction poetry, drama, nonfiction) that explore the intangible and multifaceted nature of "place" in literary works. We will attempt to determine what influence place has on human perception and behavior and study the variety of ways in which writers have attempted to evoke a "spirit of place." Authors read will include Shakespeare, Hardy, Frost, Erdrich and Heaney. *6 credits, AI, WR1, Fall—M. Kowalewski*

ENGL 100. Occupy Wall Street: Melville's "Bartleby" Taking up the mysteries of Herman Melville's 1853 tale of a disaffected office-worker in mid-19th century New York, we will pursue a variety of interpretive and critical means to situate its protest in its day and understand it for our own. Our work will lead us into the era's discourses of labor and economy; gender, domesticity, and family; slavery and authority, virtue and political resistance. Additional readings in Dickens, Marx, the Bible, Stowe and Transcendentalism. Students will write analytical essays and develop research skills using the holdings of Gould library to produce collaboratively a contextual guide to "Bartleby, the Scrivener." *6 credits, AI, WR1, Offered in alternate years, Fall—P. Balaam*

ENGL 228. The American Novel: Revolution to Romance (1790-1850) We will trace the cultural history of the U.S. as a democratic republic from the Revolution to the eve of the Civil War through the hopeful and anxious visions of eighteenth- and nineteenth-century American novelists. Topics will include the political meanings of the sentimental and the Gothic, contested claims about North American space, the "vanishing" Indian, the delayed confrontation with slavery, the issue of women's rights, and the cultural work of the "romance." Works by Hannah Foster, Brockden Brown, Cooper, Hawthorne, Fanny Fern, and Melville. *6 credits, AL, WR; LA, WR2, Offered in alternate years, Fall—P. Balaam*

ENGL 229. The American Novel: Romance to Realism (1850 to 1910) Post-Civil War writers refashioned the cultural work of fiction to express the new taste for realism and the even more chastened mode of naturalism. The novels of this period have a documentary feel, as though charged with representing and re-envisioning the drama of real American lives in a disenchanting, industrialized, and rapidly consolidating world. Readings from Howells, James, Crane, Jewett, Gilman, Dreiser, Chesnut, and Wharton. *6 credits, AL, WR; LA, WR2, Offered in alternate years, Winter—P. Balaam*

ENGL 249. Irish Literature We will read and discuss modern Irish poetry, fiction, and drama in the context of Irish politics and culture. Readings will include works by W. B. Yeats, James Joyce, Patrick Kavanaugh, Samuel Beckett, Brian Friel,

Edna O'Brien, Seamus Heaney, Eavan Boland, and Ciaran Carson, among others. *6 credits, AL, WR; LA, WR2, Fall—C. Walker*

ENGL 329. The City in American Literature How do American authors "write the city"? The city as both material reality and metaphor has fueled the imagination of diverse novelists, poets, and playwrights, through tales of fallen women and con men, immigrant dreams, and visions of apocalypse. After studying the realistic tradition of urban fiction at the turn of the twentieth century, we will turn to modern and contemporary re-imaginings of the city, with a focus on Chicago, New York and Los Angeles. Selected films, photographs, and historical sources will supplement our investigations of how writers face the challenge of representing urban worlds. Prerequisite: One Foundations English course and another 6 credit English course. Or by permission of Instructor. *6 credits, AL, WR; LA, WR2, Offered in alternate years, Winter—N. Cho*

ENGL 352. Toni Morrison: Novelist Morrison exposes the limitations of the language of fiction, but refuses to be constrained by them. Her quirky, inimitable, and invariably memorable characters are fully committed to the protocols of the narratives that define them. She is fearless in her choice of subject matter and boundless in her thematic range. And the novelistic site becomes a stage for Morrison's virtuoso performances. It is to her well-crafted novels that we turn our attention in this course. Prerequisite: One Foundations course and another 6-credit English course. Or by permission of the instructor. *6 credits, AL, WR; LA, WR2, IDS, Fall—K. Owusu*

ENGL 395. James and Wharton Focusing on major fiction of Henry James and Edith Wharton, we will also read criticism to learn a bit about their lives and literary friendship and to examine the ways they use American and international materials to explore human relationships, gender and national identities, the intersections of economic and social structures, and the nature of human consciousness. Prerequisite: English 295 and one 300-level course. *6 credits, AL, WR; LA, WR2, Fall—E. McKinsey*

ENGL 395. Advanced Seminar: V.S. Naipaul V.S. Naipaul is considered by many to be the greatest living writer in the English language, and is by any measure one of the most important and lauded novelists of the second half of the twentieth century. We will follow his trajectory from Trinidad to England, from comic novelist to chronicler of what he has termed "colonial schizophrenia". We will read all the major novels and some excerpts from his travel writing. Paying particular attention to his language, we will examine Naipaul's interrogation of the possibility of an authentic individual self within and against the possibility of community. Prerequisite: English 295 and one 300-level course. Or by permission of the instructor. *6 credits, AL, WR, RAD; LA, WR2, IS, Offered in alternate years, Spring—A. Chakladar*

ENGL 395. Murder From the ancient Greeks to the King James Bible to the modern serial killer novel, murder has always been a preeminent topic of intellectual and artistic investigation. Slaying our way across different genres and periods, we will explore why homicide has been the subject of such fierce attention from so many great minds. Prepare to drench yourselves in the blood of fiction and non-fiction works that may include: the Bible, Shakespeare, Poe, Thompson, Capote, Tey, McGinniss, Malcolm, Wilder, and Morris, as well as legal and other materials. Warning: not for the faint-hearted. Prerequisite: English 295 and one 300-level course. Or by permission of the Instructor. *6 credits, AL, WR; LA, WR2, Winter—P. Hecker*

ENTS 209. Public Rhetoric and Environmental Science In this course, students will pursue projects based in environmental science and aimed at public audiences. Forms may include grant proposals, articles for the popular press, talks aimed at peer scientists, the general public, or school groups, and posters for various audiences. In all cases, purpose, audience, and form will be carefully considered for effective communication of science. Students can expect frequent revision, assiduous peer review responsibilities, and presentation of individual projects orally and in more than one form of writing. *6 credits, ND, WR; NE, WR2, QRE, Winter—C. Rutz*

ENTS 247. Agroforestry Systems: Local and Global Perspective This course will examine the principles and practices of tropical and temperate agroforestry systems. Focus will be given to the ecological structure and function of agroforests, the economic costs and benefits of agroforests, and the social context in which agroforests operate. Specific topics include plant/soil relationships, competition and complementarity, biogeochemical cycling, design principles, and the synergies and tradeoffs among economic, social, and ecological management goals. *6 credits, SS; SI, Fall—M. Schmitt-Harsh*

ENTS 262. Materials Science, Energy and the Environment Drawing on chemistry and physics principles, this course will focus on the relationship between the structure and physical properties of materials, how materials science can address environmental and energy challenges, and the technological and societal impacts of materials development. Topics to be covered will vary from year to year, but may include material life cycle assessment, traditional plastics and biodegradable alternatives, materials and technologies for solar energy conversion, and the role of materials in developing energy efficient buildings. Students who have taken Physics 260 may not take Environmental and Technology Studies 262. *6 credits, MS, WR, NE, WR2, Winter—M Eblen-Zayas*

ENTS 265. Modeling Environmental Systems Different scientific disciplines are good at characterizing environmental systems. In this class, biogeochemical cycles relating to the rates of transport of matter and energy among water, soil, and the atmosphere will be studied as one way to sort out major local, regional, and global environmental issues. However, complex interactions among components forbid a detailed understanding of systems as they change over time. Rate modeling activities will be used in order to develop a better sense of the ways that systems change over time. Prerequisite: One of the following: Chem 128, Bio 210, Bio 221, or another introductory science class with permission of the instructor. *6 credits, MS, QRE, Winter—W. Hollingsworth*

ENTS 272. Remote Sensing of the Environment This course provides an introduction to the use of remotely sensed imagery and the application of remote sensing in environmental and natural resources management. Topics include raster-vector integration, geometric and atmospheric correction, spatial and spectral enhancement, image classification, change detection, and spatial modeling. This course will involve both lecture classes that will be used for presentation of fundamental topics and theory and sessions devoted to providing hands-on experience in the processing and interpretation of remotely sensed imagery. Prerequisites: ENTS 120 is recommended but not required. *6 credits, MS, NE, Winter, --M. Schmitt-Harsh*

ENTS 288. Abrupt Climate Change The field of abrupt climate change seeks to understand very fast changes, or "tipping points," in historical climate records. Course topics include interpretation of historical climate data, methods of measuring abrupt changes in ancient climates, theories for abrupt change, the role of complex earth systems, and the connection to trends in global climate change. The course will directly address our future vulnerability to abrupt climate change through case studies of past human civilizations. Includes a term-long multimedia team project, with an academic civic engagement component, at the intersection of abrupt climate change and an issue of human concern. Prerequisites: One introductory course in Biology (125 or 126) or Chemistry (123 or 128) or Geology (110, 115 or 120) or Physics (two five-week courses from 131 through 162). *6 credits, MS, WR; NE, WR2, QRE, Spring—T. Ferret*

ENTS 395. Senior Seminar This seminar will focus on preparing Environmental Studies majors to undertake the senior comprehensive exercise. The seminar will be organized around a topic to-be-determined and will involve intensive discussion and the preparation of a detailed research proposal for the comps experience. The course is required for all Environmental Studies majors choosing the group comps option. *3 credits, ND; SI, Fall—K. Smith*

EUST 140. Culture or Barbarity? The German Question German culture has had a profound influence on world history, but one often wonders how the culture that produced Goethe, Schiller, Luther, Beethoven, and Kant was also the source of some of the greatest atrocities of the twentieth century. We will attempt to understand the reasons for this dichotomy by considering the development of Germany within the context of Europe from Roman times to the present. *6 credits, HU; HI, IS, Offered in alternate years, Spring—R. Paas*

EUST 250. Statebuilding in History and Theory The concept of the "state" has recently seen a scholarly renaissance, inspiring new literatures and comparative studies of Western and non-Western statehood. Its continuing relevance has been highlighted by the financial crisis and the ensuing debate about the "crisis state" as well as by various efforts at "state-building" in response to actual or perceived "failed states" around the world. In this course we use a series of case studies and methods to ask: What traditions of thinking about the state are available to us? Can the Western experience of statehood be universalized and at what cost? What are the alternatives? *6 credits, SS, WR; SI, WR2, Spring—P Petzschmann*

EUST 279. Cross Cultural Psychology in Prague: Nationalism, Minority and Migration In this course students will be introduced to the complex phenomena of migration, nationalism, and the formation of ethnic minorities in modern Europe through theory and historical examples. Among the topics covered will be European attitudes and policies toward minorities (including Jews, Roma, Muslims, and Africans) and the responses of those minorities to them, from assimilation to dual identity to nationalism. *6 credits, HU; HI, IS, Fall—Non-Carleton Faculty*

FREN 101. Elementary French This course introduces the basic structures of the French language and everyday vocabulary in the context of common cultural situations. Students are exposed to all four skills (reading, writing, listening and speaking). Taught five days a week in French. Prerequisite: none (Placement score for students with previous experience in French). *6 credits, ND; NE, Fall—Staff*

FREN 102. Elementary French Building on the material covered in French 101, this course introduces complex sentences and additional verb tenses. Students apply the tools of narration in context through the reading of short literary and cultural texts. The focus of the course is on all four skills (reading, writing, listening and speaking). Taught five days a week in French. Prerequisite: French 101 or placement score. *6 credits, ND; NE, Winter—Staff*

FREN 103. Intermediate French This course continues the study of complex sentence patterns and reviews basic patterns in greater depth, partly through the discussion of authentic short stories and cultural topics. Throughout the course, students practice all four skills (reading, writing, listening and speaking). Taught five days a week in French. Prerequisite: French 102 or placement score. *6 credits, ND; NE, Fall, Spring—Staff*

FREN 208. Paris Program: Cultural Themes Focusing on topics of current interest in French society, this course is designed to help students gain ease and proficiency in spoken and written French. While providing some focused work on language skills, emphasis will be placed on cultural issues, often drawing on current events. Work will include regular writing, discussion, and short presentations. *6 credits, AL; HI, IS, Spring – S. Carpenter*

FREN 240. The Seven Deadly Sins The Seven Deadly Sins (the source of all vices) captured the medieval western imagination and continue to inspire diverse writers, artists and filmmakers to the present day. From La Fontaine's fables to the African tales of Amadou Koumba, from Maupassant's *Carmen* (and Bizet's eponymous opera) to Camus's *The Stranger*, this course will explore literary and filmic representations of such vices as pride, envy and lust. It will also interrogate the presence and power of these categories in contemporary culture. An introduction to the study of French and Francophone literatures, the course develops students' skills in analysis and discussion in French. Prerequisite: French 204 or the equivalent. *6 credits, AL; LA, IS, Fall—C. Yandell*

FREN 241. Journeys of Self-Discovery What initiates the process of self-discovery? How does one's environment nurture or hinder this journey? What are the repercussions of being introspective? How do new discoveries about the self inform life choices? Such questions will animate this survey course, which proposes to examine a variety of paths towards self-knowledge through the prism of French and Francophone literature, music, and the visual arts. From ravishing fairy tale fugitives and intrepid travelers to lucid prisoners and uprooted exiles, we will explore the richly diverse literary landscape of the French-speaking world with special attention given to developing analytical and communicative skills. Conducted in French. Prerequisite: French 204 or equivalent. *6 credits, AL, RAD; LA, IS, Spring—É. Pósfay*

FREN 243. Topics in Cultural Studies: Cultural Reading of Food "Tell me what you eat, I will tell you who you are." Brillat-Savarin. Through the thematic lens of food, we will study enduring and variable characteristics of French society and compare it to American and other societies when appropriate. We will analyze various cultural texts and artifacts (fiction, non-fiction, print, film, and objects) from medieval times to the present with a pinch of theory and a dash of statistics. Course may be repeated if the topic is different. Prerequisite: French 204. *6 credits, AL, WR; HI, WR2, IS, QRE, Winter—C. Lac*

FREN 246. Paris Program: Modern French Art Home of some of the finest and best known museums in the world, Paris has long been recognized as a center for artistic activity. In this course students will have the opportunity to study such movements as Impressionism, Expressionism, and Surrealism on site. In-class lectures and discussions will be complemented by guided visits to the unparalleled collections of the Louvre, the Musée d'Orsay, the Centre Pompidou, local art galleries, and other appropriate destinations. Special attention will be paid to the program theme. No previous Art History required. *6 credits, AL; LA, IS, Spring – S. Carpenter*

FREN 247. Paris Program: France and the European Union Originally an economic alliance, the European Union has developed structures and institutions far surpassing the goals of the original project. This course will examine the tensions between the nation-state and the Union, giving special attention to the entanglement of immigration, religion, and governance. Course will draw on the counterpoint example of Spain. Classes are supplemented by visits to relevant sites and by lectures by local experts. No previous Political Science coursework required. *6 credits, AL, SI, IS, Spring –S. Carpenter*

FREN 249/349. Paris Program: European Identities: Paris and Madrid Paris is a world capital, a crossroads of cultures, races, classes, and languages. This vibrancy is related to France's central role in the European Union, the evolution of which has produced tremendous changes within its member nations. The transformation of Europe has strained national and regional identities, and this strain can be "read" in various forms of expression, including literature, art, monuments, and public events. Studying the particular cases of Paris and Madrid—a "field trip" to Madrid is planned—students will examine the ways in which France is (re)defining itself within the context of an evolving Europe. *6 credits, AL; LA, IS, Spring –S. Carpenter*

FREN 359. Twentieth Century Literature: The Novel and Memory Marcel Proust's quest to retrieve the past set the stage for future writers who have undertaken the challenging task of probing what bell hooks has called "the debris of history." In this course, we will study representative novels and films dealing with memory, paying particular attention to the high stakes involved in remembering (and forgetting) at the intersection of personal story and history. Prerequisite: 200-level French course or permission of instructor. *6 credits, AL; LA, IS, Offered in alternate years, Fall—D. Strand*

GEOL 100. Geology in the Field This course introduces fundamental principles of geology and geological reasoning through first-hand field work. Much class time will be spent outdoors at nearby sites of geological interest. Using field observations, descriptions, data-gathering, hypothesis-testing, and interpreting, supplemented by lab work and critical reading, students will piece together the most important elements of the long and complex geologic history of southern Minnesota. They will learn how geologists ask questions, evaluate information and construct arguments. The course includes several writing assignments. Two weekend field trips will be included. *6 credits, AI, WR1, QRE, Fall—C. Davidson*

GEOL 110. Introduction to Geology An introduction to the study of earth systems, physical processes operating on the earth, and the history of the earth. Field trips, including an all-day trip, and laboratories included. Not open to students who have taken another Geology 100-level course *6 credits, MS; LS, Fall, Spring—B. Haileab, S. Titus*

GEOL 115. Climate Change in Geology This course is designed to introduce the study of paleoclimatology broadly, and is based on investigating local deposits that span a broad range of geologic time. We will perform research projects on topics of local interest, which may include: analyzing fossils in 450 million year old rock, scrutinizing reported Cretaceous dinosaur gizzard-stones, researching post-Ice Age climate change using cave or lake deposits, and using dendrochronology (tree rings) and seismic surveys to study disruption of the prairie-big woods landscape by European settlers. Participants should be prepared for outdoor laboratories and one Saturday field trip. Not open to students who have taken another Geology 100-level course. *6 credits, MS; LS, Winter—C. Cowan*

GEOL 210. Geomorphology Study of the geological processes and factors which influence the origin and development of the surficial features of the earth, with an emphasis on some or all of the processes in Minnesota. Laboratories and field trips included. Prerequisite: One introductory (100-level) Geology course or consent of instructor. *6 credits, MS, WR; LS, WR2, QRE, Offered in alternate years, Fall—C. Jennings*

GEOL 220. Tectonics This course focuses on understanding the plate tectonics paradigm and its application to all types of plate boundaries. We will explore the historical development of the paradigm, geophysical tools used for imaging the structure of the Earth and determining plate motions, and possible driving mechanisms of this global system. Students will independently explore a particular tectonic plate in detail throughout the term. Laboratories included. Prerequisite: One introductory (100-level) Geology course. *6 credits, MS, WR; LS, WR2, Fall—S. Titus*

GEOL 230. Paleobiology Fossils: their anatomy and classification, evolution, and ecology. Special emphasis on the paleobiology of marine invertebrates. Field trips and laboratories included. Prerequisite: One introductory (100-level) Geology course or an introductory Biology course, or consent of the instructor. *6 credits, MS; LS, Spring—C. Cowan*

GEOL 232. Tropical Marine Biogeoscience This course will focus on background needed to perform fieldwork in Belize. We will use sources from the primary literature, as well as borrowings from textbooks, to learn some basics about oceanography, tropical marine ecosystems, benthic marine organisms and their habitats, the Caribbean Sea, and global changes that are affecting these things. Students will work in teams to formulate research topics that they will then pursue during the two weeks of fieldwork over Winter Break. We may need to get together several times during Fall Term to practice snorkeling in the pool. *6 credits, ND; NE, Fall—C. Cowan*

GEOL 233. Field Research in Belize Tropical Marine Environments This course will consist of fieldwork in Belize for two weeks at the University of Belize's Calabash Caye Field Station followed by on-campus work during Winter Term. *6 credits, ND; NE, Winter—C. Cowan*

GEOL 250. Mineralogy The study of the chemical and physical properties of minerals, their geologic occurrence and associations. Topics include crystallography, crystal chemistry, x-ray analysis, phase equilibria, classification, optical mineralogy, and environments of formation. Laboratories are included. Prerequisite: One introductory (100-level) Geology course, or Chemistry 123 or 128. *6 credits, MS; LS, Winter—C. Davidson*

GEOL 340. Hydrology A seminar on major principles of ground and surface water hydrology and their application to contemporary hydrologic problems. The course will draw considerably on student-directed investigation of critical areas of study in hydrology. Prerequisite: Geology 210 or junior/senior standing in one of the physical sciences. *6 credits, MS, WR; LS, WR2, QRE, Spring—R. Tipping*

GEOL 360. Sedimentology and Stratigraphy This course is based on field examination of outcrops of Lower Paleozoic sedimentary rock. We will interpret the processes involved in the creation, movement, and deposition of these ancient sediments, and try to determine their paleoenvironments. Also of interest are the transformation of these sediments into rock and the analysis and correlation of strata. Weekly laboratories, one overnight trip, and one Saturday trip are required. Please note the late laboratory times. Both paleobiology and geomorphology prepare students for work in sedimentology. This course is intended for upperclass Geology majors, and much of the work is done in teams. Prerequisite: Three 200-level

Geology courses. *6 credits, MS, WR; LS, WR2, Fall—C. Cowan*

GEOL 365. Structural Geology This course focuses on rock deformation at scales ranging from the collision of continents to the movement of individual atoms within crystals. We will examine structures that develop within different layers of the Earth's lithosphere and discuss how and why these structures form. Reading, discussion, and presentation of scientific literature is expected throughout the term as we focus on deformation and tectonics in a single region. Laboratories and one weekend field trip are included. Prerequisite: One introductory (100-level) Geology course, six credits of Physics numbered 131 and above is recommended. *6 credits, MS; LS, Winter—S. Titus*

GERM 206 Composition and Conversation Short texts, films, video clips and other cultural materials serve as the basis for discussions of contemporary German and Austrian culture. Prerequisite: German 204 or the equivalent. *6 credits, ND, NE, Winter – S. Leonhard*

GERM 261. Contemporary German Fiction In this course we will explore very contemporary writings in German from the last decade or two and analyze current trends in literature, society and politics. Readings will include novels, short stories, plays and graphic fiction. Conducted in German. Prerequisite: German 204. Recommended preparation: at least one course above German 204. *3 credits, AL; LA, IS, Spring—K. Herklotz*

GERM 345 Vie

Vienna: Dream and Reality The course will examine the beginnings of Modernism in Austrian culture, music, theater, art, architecture, and philosophy, focusing on literature within its wider context. Students will look at such thinkers and artists as Freud, Schnitzler, Hofmannsthal, Hermann Bahr, Karl Kraus, Robert Musil, Peter Altenberg, and Wittgenstein, as well as the great musicians, architects, and painters of the time. The group will survey the history and culture of the period between 1870 and 1930, with the primary focus on the period from around 1890-1920. Lectures and discussions will be in German. *6 credits, AL, LA, IS, Fall – A. Ulmer*

GRK 204. Greek Poetry Selected readings from Homer (in odd-numbered years) or Greek Tragedy (in even-numbered years). Prerequisite: Greek 103 with a grade of at least C-. *6 credits, ND; NE, Winter—C. Polt*

GRK 240. Xenophon's Oeconomicus Xenophon's *Oeconomicus* is a fascinating text preserving valuable primary evidence on Classical Athenian attitudes toward gender, household management, marital relations, slavery, urban and rural domestic life, and household religion among many other topics. We will read selections of the Greek and the whole in English, as well as some of the very interesting secondary literature -- from Foucault to Leo Strauss -- on this unique work. Prerequisite: Greek 204 or the equivalent. *6 credits, AL; LA, IS, Spring—C. Hardy*

GRK 305. Homer Intensive study of selections from Homer's *Iliad* or *Odyssey*. Offered simultaneously with Greek 204, with additional assignments for the advanced students. Prerequisite: Greek 204 or the equivalent. *6 credits, AL; LA, Offered in alternate years, Winter—C. Polt*

HIST 100. American Antebellum Slavery: History and Historians This seminar focuses on the nature of the antebellum slave experience as one of the great debates in American historiography. The course begins with Ulrich Bonnell Phillips's controversial 1918 interpretation and moves to selected major revisionist studies from the late 1950s through the 1990s that incorporate fresh scholarship on women, culture, and economics. There is emphasis on sharpening critical thinking and writing skills. *6 credits, AI, WR1, Fall—H. Williams*

HIST 100. Lewis and Clark's West When the Lewis and Clark expedition headed up the Missouri River in 1804, they entered a world far wider and far more complicated than any of the explorers realized. The diverse landforms, ecological communities, and Native peoples they encountered were woven together in ways that reached widely across space and drew on roots thousands of years deep. It was also a world being refashioned by all sorts of new forces creeping into the region from nearly every direction. This course will explore this complex and changing world--the West in the age of Lewis and Clark. *6 credits, AI, WR1, IDS, Offered in alternate years, Fall—G. Vrtis*

HIST 100. Visualizing Friends and Enemies in the Socialist World In the socialist world during the Cold War, the world was divided into friends and enemies. We will study the construction and pedagogical use of these images from political cartoons, books, exhibitions, posters, photographs, television and film, and examine how images of enemies like the United States and Israel and friends such as the USSR and China were mobilized to provide examples for proper behavior in socialist countries. With reference to the theoretical and historical literature, we will engage in an analysis of these visual sources to more deeply understand the societies in which they circulated. *6 credits, AI, WR1, IS, Fall—D. Tompkins*

HIST 126. African American History II The transition from slavery to freedom; the post-Reconstruction erosion of civil

rights and the ascendancy of Booker T. Washington; protest organizations and mass migration before and during World War I; the postwar resurgence of black nationalism; African Americans in the Great Depression and World War II; roots of the modern Civil Rights movement, and black female activism. *6 credits, HU, WR, RAD; WR2, IDS, Winter—H. Williams*

HIST 137. Early Medieval Worlds Through the intensive exploration of four "worlds" in the early Middle Ages (Late Antique Italy, Anglo-Saxon England, Carolingian Europe, the Holy Roman Empire) this course seeks to offer an introduction to formative political, social, and cultural developments in Europe between c. 250 and c.1050s. Particular attention will be paid to the sources of our knowledge of early medieval people and polities. Development of a student-designed public exhibition on early medieval books and scribal culture will be an essential element of the course. *6 credits, HU, WR; HI, WR2, IS, Offered in alternate years, Fall—W. North*

HIST 151. History of Modern Japan This course explores the modern transformation of Japanese society, politics, economy and culture from the Meiji Restoration of 1868 to the present. It is designed to provide students with an opportunity to explore basic issues and problems relating to modern Japanese history and international relations. Topics include the intellectual crisis of the late Tokugawa period, the Meiji Constitution, the development of an interior democracy, class and gender, the rise of Japanese fascism, the Pacific War, and postwar developments. *6 credits, HU; HI, IS, Winter—S. Yoon*

HIST 156. History of Modern Korea A comparative historical survey on the development of Korean society and culture from the nineteenth century to the present. Key themes include colonialism and war, economic growth, political transformation, socio-cultural changes, and historical memory. Issues involving divided Korea will be examined in the contexts of post-colonialism and Cold War. Students are also expected to develop skills to analyze key historical moments from relevant primary sources against broader historiographical contexts. *6 credits, HU, RAD; HI, IS, Spring—S. Yoon*

HIST 161. History of Modern India A survey of the modern history of the Indian sub-continent from the establishment of the Mughal Court in North India (1525 AD) until the formation of the Republic of India (1947 AD), including the regional states, the British East India Company, British colonial rule and the rise of nationalism. Students will be asked to consider the differences between the early modern and colonial periods, and the empires of the subcontinent. *6 credits, HU, RAD; HI, IS, Winter, A. Khalid*

HIST 165. Islam and Muslims in the Modern World This course provides a basic introduction to the history of the wider Muslim world from the eighteenth century to the present. We will discuss the cultural and religious diversity of the Muslim world and its varied interactions with modernity. We will find that the history of the Muslim world is inextricably linked to that of its neighbors, and we will encounter colonialism, anti-colonialism, nationalism, and socialism, as well as a variety of different Islamic movements. *6 credits, HU, RAD; HI, IS, Offered in alternate years, Spring—A Khalid*

HIST 201. Rome Program: Power and Piety in Medieval Rome, 300-1150 This course will examine the ways in which city of Rome and its environs was transformed from the capital of a pagan empire into a center of Christian pilgrimage and culture and ultimately into the pinnacle of ecclesiastical power in the medieval West. We will pay particular attention to the expression of these changes in the form and functions of the City's buildings and urban fabric as well as examine influential contemporary developments and models in other regions of Italy such as Ravenna and Sicily. Prerequisite: Enrollment in Rome off-campus program. *6 credits, HU; HI, WR2, IS, Spring—W. North*

HIST 206. Rome Program: Eternal City in Time: Urban Structure and Change This course will explore the lived experience of the city of Rome in the twelfth through sixteenth centuries. We will study buildings, urban forms, surviving artifacts, and textual evidence to understand how politics, power, and religion mapped onto city spaces, how daily life was shaped by urban challenges and opportunities, how the urban and rural environments interacted. Students will work on projects closely tied to the city fabric, in addition to completing reading and writing assignments and participating in discussions. Prerequisite: Enrollment in the Rome off-campus program. *6 credits, HU, WR; HI, WR2, IS, Spring—V. Morse*

HIST 207. Rome Program: A Roman Journal: Travelers' Accounts as Source and Experience Travel narratives are vital sources of information about historical and artistic monuments, social and cultural practices, and larger impressions of people and place. Using a selection of historical travel narratives concerned with Rome and Italy, we will explore the potential and pitfalls of travel accounts as historical evidence. Students will also experience the intellectual and experiential challenges and opportunities of travel writing by construction their own travel accounts. Prerequisite: Enrollment in Rome off-campus program. *3 credits, HU; HI, IS, Spring—W. North*

HIST 211. Puritans, Sex and Slavery Puritans in the Caribbean, Indian slavery, and teenage sex: colonial America (1585-1763) had a lot more going on than Pilgrims and Plymouth Rock. In the two hundred years from the first English settlement at Roanoke to George Washington's first military disaster of the French and Indian War, the early American

landscape changed out of all recognition. We will investigate what it was like for both migrants and natives to create new families and communities in a world characterized by death, religion, and slavery. *6 credits, HU, HI, IDS, Fall—S Zabin*

HIST 236. Women's Lives in Pre-Modern Europe Did women have a Renaissance? Were women increasingly relegated to a separate sphere from men: "domesticated" into the household? Or, on the contrary, is the history of European women characterized by fundamental continuities? This course seeks to answer these questions through an exploration of women's place in the family and economy, laws and cultural assumptions about women, and women's role in religion. Throughout the term, we will be focusing not only on writings about women, but primarily on sources written by women themselves, as we seek a fuller understanding of the nature of European women's lives before the modern era. *6 credits, HU, WR; HI, WR2, IS, Offered in alternate years, Winter—V. Morse*

HIST 242. Communism, Cold War, Collapse: Russia since Stalin In this course, we will explore the history of Russia and other former Soviet states in the period after the death of Stalin, exploring the workings of the communist system and the challenges it faced internally and internationally. We will investigate the nature of the late Soviet state and look at the different trajectories Russia and other post-Soviet states have followed since the end of the Soviet Union. *6 credits, HU; HI, IS, Spring—A. Khalid*

HIST 249. Two Centuries of Tumult: Modern Central Europe An examination of the political, social, and cultural history of Central Europe from 1848 to the present day. We will explore the evolution of state and civil society in the multicultural/multinational regions of the present-day Czech Republic, Slovakia, Poland, Hungary, as well as eastern Germany and Austria. Much of the course will focus on the common experiences of authoritarianism, anti-Semitism, fascism/Nazism, and especially the Communist era and its dissolution. *6 credits, HU; HI, IS, Winter—D. Tompkins*

HIST 272. The Mexican Revolution The first major revolution of the twentieth century, the Mexican Revolution of 1910 exerted a profound and enduring influence that extended well beyond the nation's borders. This course begins with an examination of the historical origins of the conflict before delving into both its domestic and international dimensions. The second half of the term focuses on the emergence of an authoritarian post-revolutionary state, its efforts to transform the nation's economy, society and culture, as well as the challenges these projects generated among grassroots movements and political, artistic, and intellectual dissidents. *6 credits, HU; HI, IS, Offered in alternate years, Spring—A. Fisher*

HIST 278. The Spanish Inquisition The Inquisition was the Spanish crown's principal tool for combating heterodoxy and deviance. This course examines the Tribunal's campaigns to eradicate religious, cultural, racial, sexual, and political sources of contagion in both Spain and the New World. Through the prism of its sources, including the interrogations and confessions of the accused, we will study the Inquisition's prosecution of a range of alleged crimes, including relapsed conversion (of Jews, Muslims and Indians), witchcraft, diabolism, homosexuality, and female mysticism. Particular care will be given to the methodological challenges involved in using inquisition sources for the study of popular culture and religion. *6 credits, HU; HI, IS, Offered in alternate years, Winter—A. Fisher*

HIST 280. Africans in the Arab World Study of African people's existence as religious, political, military leaders, slaves and poets in Arab societies from ancient to modern times; experiences of men as eunuchs, women as concubines and wives; development of African Diaspora and Arab societies. Preceding rise of Islam, movement of Africans as merchants, warriors, religious leaders and enslaved peoples from Sahara Desert to Nile valley, from Red Sea to the Indian Ocean. Highlights Morocco, Egypt, Sudan in North Africa to Iraq, Saudi Arabia, Oman, UAE, in the Middle East; experiences of peoples whose dark skin became equated with slave status but became loyal followers of Islam in Arab world. *6 credits, HU, WR, RAD; HI, WR2, IS, Fall—T. Willis*

HIST 285. Museums, Monuments, and Memory "History" is not just the name of a department at Carleton College; "History-making" is an activity engaged in by everybody, everyday. We watch historical movies, listen to political leaders invoking history in making policy, tour historic sites and museums, etc. We listen to our elders tell us stories about their lives, and we tell ourselves stories that place our experiences into the historical continuum. This course ranges widely over the varied and sometimes risky terrain of contemporary history-making in Minnesota and beyond to examine preservation organizations, museums, archives, oral history projects, documentary films, historic sites, schools, theater, TV, and cyberspace. *3 credits, HU; HI, IDS, Spring—B. Horrigan*

HIST 286. Africans in the Arab World: On Site and Revisited This course is the second part of a two-term sequence. It begins with a two-week December-break trip to Dubai, UAE, to visit museums, mosques, other heritage sites, universities, media outlets, and markets. It promotes dialogue with Afro-Arab women around the historical constructions of gender, race, and ethnicity in heritage sites, Islam, Arab media, academic institutions, and popular culture. Ultimately, students will ponder Afro-Arab women's voice and visibility beyond the home in this Arab society. Then upon return to Carleton, students will reflect upon their experiences in the UAE, analyze their data, and present it in oral, written, and visual

formats. Prerequisite: History 280. *6 credits, HU, RAD; HI, IS, Not offered in 2012-2013—T. Willis*

HIST 308. American Cities and Nature Since the nation's founding, the percentage of Americans living in cities has risen nearly sixteenfold, from about 5% to the current 79%. This massive change has spawned legions of others, and all of them have bearing on the complex ways that American cities and city-dwellers have shaped and reshaped the natural world. This course will consider the nature of cities in American history, giving particular attention to the dynamic linkages binding these cultural epicenters to ecological communities, environmental forces and resource flows, to eco-politics and social values, and to those seemingly far-away places we call farms and wilderness. Prerequisite: History 205 or permission of the instructor. *6 credits, HU, WR; HI, WR2, IDS, Offered in alternate years, Winter—G. Vrtis*

HIST 322. Civil Rights and Black Power This seminar treats the struggle for racial justice from World War II through the 1960s. Histories, journalism, music, and visual media illustrate black and white elites and grassroots people allied in this momentous epoch that ranges from a southern integrationist vision to northern Black Power militancy. The segregationist response to black freedom completes the study. Research project on twenty-first century Minnesota hate groups. *6 credits, HU, RAD; HI, IDS, Offered in alternate years, Winter—H. Williams*

HIST 395. Voyages of Understanding This seminar will focus on historical understandings of the experience of travel. We will look at motivations for travel; ideas about place, space, and geography; contacts with people of different religions, ethnicities, and cultures; the effect of travel on individual and group identity; and representations of travel, cultural contact, and geography in texts, maps, and images. Each student will conduct an original research project leading to a 25-30 page research paper. *6 credits, HU, WR; HI, WR2, IS, Fall—V. Morse*

HIST 395. Dictatorships and Authoritarian Movements This seminar examines the phenomena of modern dictatorships and authoritarian movements throughout the world. We will broadly engage the main historiographical debates, and we will focus specifically on the establishment of these regimes and the leadership and political structures that emerged, as well as recent literature on women, everyday life and mentalities, and high and popular culture. A major research paper is required, as is critical engagement with readings both theoretical and practical through both writing and classroom discussion. *6 credits, HU; HI, Spring—D. Tompkins*

LATN 242. Apuleius Selections from the *Golden Ass* in the original as well as reading the entire work in English translation. Prerequisite: Prerequisite: Latin 204. *6 credits, AL; LA, Spring—C. Zimmerman*

LATN 257. Caesar, Lucan, and Civil War This course will examine narratives of the early stages of the Roman Civil War through contemporary prose accounts of Caesar and Cicero and the poet Lucan's Neronian epic on the Civil War. Topics will include manipulation of public opinion and memory, historical reconstruction through text, the relationship between prose history and historical epic, and the literal and metaphorical dissolution of Rome through civil war, as well as stylistic and philosophical concerns specific to each author. Prerequisite: Latin 204 (or equivalent). *6 credits, HU; HI, IS, Winter—K. Steed*

LATN 259. Vergil Intensive study of selections from Vergil. Prerequisite: Latin 204 or the equivalent. *6 credits, AL, WR; LA, WR2, Fall—C. Polt*

LATN 359. Vergil Intensive study of selections from Vergil. Offered simultaneously with Latin 259, with additional assignments for the advanced students. Prerequisite: Latin 204 or the equivalent. *6 credits, AL, WR; LA, WR2, Fall—C. Polt*

LING 100. The Noun We've all been taught that nouns are people, places, and things. Yet, these seemingly simple linguistic objects are surprisingly complex. For instance, languages vary in what information (e.g., case, gender, person, number) nouns display. Even within a single language, the form of a noun may change depending on its function within a sentence or its function within a conversation. This course uses contemporary linguistic theories to account for the many varied forms of nouns throughout the world's languages. No familiarity with languages other than English is required. *6 credits, AI, WR1, Fall—C. Ussery*

MATH 251. Chaotic Dynamics An exploration of the behavior of non-linear dynamical systems. Topics include one- and two-dimensional dynamics, Sarkovskii's Theorem, chaos, symbolic dynamics, and the Hénon Map. Prerequisite: Mathematics 236 or consent of the instructor. *6 credits, MS; FSR, Offered in alternate years, Winter—S. Patterson*

MATH 275. Introduction to Statistical Inference Introduction to modern mathematical statistics. The mathematics underlying fundamental statistical concepts will be covered as well as applications of these ideas to real-life data. Topics include: resampling methods (permutation tests, bootstrap intervals), classical methods (parametric hypothesis tests and confidence intervals), parameter estimation, goodness-of-fit tests, regression, and Bayesian methods. The statistical package R will be used to analyze data sets. Prerequisite: Mathematics 265. *6 credits, MS; FSR, QRE, Winter—K. St. Clair*

MATH 295. History of Mathematics Close readings of various mathematical works dating from the seventeenth

through nineteenth centuries; choices designed to illuminate the major developments of modern mathematics.

Prerequisite: Mathematics 236. *6 credits, MS; FSR, Spring—S. Kennedy*

MATH 315. Topics in Probability and Statistics: Stochastic Processes Introduction to the main discrete and continuous time stochastic processes. Topics include Markov chains, Poisson process, continuous time Markov chains, Brownian motion. Use of R and/or Mathematica. Prerequisite: Mathematics 232 and 265. Mathematics 232 may be waived with consent of instructor. *6 credits, MS; FSR, QRE, Offered in alternate years, Spring—R. Dobrow*

MATH 344. Differential Geometry Local and global theory of curves, Frenet formulas. Local theory of surfaces, normal curvature, geodesics, Gaussian and mean curvatures, Theorema Egregium. Prerequisite: Mathematics 236 or consent of the instructor. *6 credits, MS; FSR, Offered in alternate years, Fall—S. Patterson*

MATH 395. Topics in Probability Selected topics in Probability beyond the level of Math 265. Topics may include: Characteristic functions and limit theorems, Convergence, Poisson Process, Coupling, Martingales, Poisson approximation, Bounding probabilities. Prerequisite: Mathematics 236, 265 and permission of instructor. *6 credits, S/CR/NC, MS; FSR, QRE, Winter—R. Dobrow*

MUSC 100. Keeping It Real: Authenticity and Popular Music This course will examine issues of identity and authenticity in American popular music of the twentieth and twenty-first centuries. Course materials will include academic and non-academic readings and listening assignments that will provide students with an outside perspective on authenticity in action, while also venturing into topics that allow students to speak from an insider perspective in order to contextualize their own identification and its construction. *6 credits, AI, WR1, Offered in alternate years, Fall—A. Flory*

MUSC 101. Music Fundamentals A course designed for students with little or no music background as preparation and support for other music courses, ensemble participation and applied music study. The course covers the fundamentals of note and rhythmic reading, basic harmony, and develops proficiency in aural skills and elementary keyboard skills. This class will make regular use of the music computer lab for assignments. *3 credits, AL; ARP, Spring—N. Melville*

MUSC 144. Music and Social Movements We'll consider the central role of music in a variety of social movements, including the labor, civil rights, gay rights, and anti-war movements, the anti-nuclear and environmental movements, the American Indian Movement, the Black Arts movement, the Jesus Movement, the Arab Spring, and Occupy Wall Street. How, specifically, is music instrumental in social change? What musical choices are made, and by whom? How are new musics made, and old musics repackaged, to help mobilize social movements and create collective identity? We'll approach these questions through focused listening and through the work of diverse scholars and participants. No musical experience required. *6 credits, AL, WR; SI, WR2, IDS, Spring—M. Russell*

MUSC 186. Carleton Singers The Carleton Singers is a small, highly select vocal group dedicated to performing a cappella choral music of all periods and styles. The Singers comprise the core of the Carleton Choir. Membership is offered to students who demonstrate exceptional vocal and musical skills. The need to balance all parts (Soprano, Alto, Tenor and Bass) dictates the size of the ensemble. With few exceptions, membership is for the full year. Admission by audition and concurrent registration in Music 185 are required. *1 credit, S/CR/NC, AL; ARP, Fall, Winter, Spring—L. Burnett*

MUSC 195. Jubilee Singers The Carleton Jubilee Singers perform sacred music in the oral traditions of Africans and Black Americans. The ensemble performs each year in the MLK, Jr. commemorative worship service, the Black Student Alliance variety show, and the Black History Month worship service. All students are welcome without audition. *1 credit, S/CR/NC, AL; ARP, Winter—L. Burnett*

MUSC 208. Computer Music and Sound This course will survey computer techniques for analyzing, synthesizing, manipulating and creating musical sounds. We'll study the basic components of digital sound: waveforms, oscillators, envelopes, delay lines, and filters. We'll analyze and modify sounds using the Fast Fourier Transform (FFT). We'll study several methods of sound synthesis and create and play original music using open source computer music languages. Course projects will include real-time performances on multiple computers using video game controllers. *6 credits, AL; ARP, Spring—J. Ellinger*

MUSC 333. The Beatles A critical examination of the music and cultural impact of the Beatles. Students will engage with primary and secondary materials relating to the music of the Beatles, perform basic musical analyses, and participate in class presentations. The course will conclude with a research paper. Prerequisite: The ability to read music and a previous music course, or permission of instructor. *6 credits, AL, WR; LA, WR2, Offered in alternate years, Winter—A. Flory*

PE 120. Diving This class is an introduction to 1-meter and 3-meter springboard diving. Students will first learn safety techniques for on the board, in the air, and while entering the water. They will then learn board work hurdles and back

presses, "in-air" technique, and "entry" technique. At the end of this course, students will be able to safely execute and perform jumps, dives, flips and/or twists off a diving board and understand and appreciate diving as a participant and observer. Students should have intermediate swimming skills so that they are safe and comfortable in the water. *0 credits, S/CR/NC, ND; NE, Spring—Staff*

PE 176. Swimming, Synchronized This class will be an introduction to synchronized swimming. We will teach basic skills, including sculling, eggbeater, hybrids, lifts and figures, during the first part of the course, and we will teach a simple routine during the second part of the course. It will culminate with a small performance. Students should have intermediate swimming skills so that they are safe and comfortable in the water. *0 credits, S/CR/NC, ND; NE, Spring—Staff*

PE 191. Water Polo, Beginning This class is designed to introduce you to the exciting sport of Water Polo. From learning how to tread water to shooting a ball, we will cover all the basics of the game of Water Polo. No experience with water polo required, but knowing how to swim is encouraged. Students should have intermediate swimming skills so that they are safe and comfortable in the water. *0 credits, S/CR/NC, ND; NE, Spring—Staff*

PE 348. Contemporary Issues in Athletics An examination of athletics and their relationship to society. This course focuses on the emergence of contemporary sport and the current issues facing participants, coaches, administrators, and spectators. A special emphasis is placed on understanding the motivating factors behind sport and developing a philosophy of sport that will help students evaluate current sporting issues in society. *6 credits, S/CR/NC, ND; SI, Fall—L. Battaglini*

PHIL 100. Science, Faith, and Rationality This seminar will introduce the student to the study of philosophy through a consideration of various epistemic and metaphysical issues surrounding science and religion. What distinguishes scientific inquiry from other areas of inquiry: its subject matter, its method of inquiry, or perhaps both? How does scientific belief differ from religious belief, in particular? Is the scientist committed to substantive metaphysical assumptions? If so, what role do these assumptions play in scientific investigation and how do they differ from religious dogma (if they do)? Our exploration of these questions will involve the consideration of both classic and contemporary philosophical texts. *6 credits, AI, WR1, Fall—J. Decker*

PHIL 110. Appearance and Reality Nothing is what it seems. This claim has been one of the staples of philosophy. Naturally, theories of the reality that lies behind the appearances have been many and diverse. For Platonists, there are only immaterial forms and the intellectual souls that grasp them. For Eliminative materialists there are only physical things and the laws that govern them. To the modern reader, this second theory seems unproblematic, but it too, means that most of what we assume to be obviously true is mistaken. In this course, we shall examine these, and other, accounts of the reality behind the appearances. *6 credits, HU, WR; HI, WR2, Spring—D Vlahovic*

PHIL 117. Philosophical Problems This is an introduction to perennial philosophical questions, as well as the goals and methods of philosophy. We will cover selections from both historical and contemporary philosophers on the following five topics: (i) the nature and possibility of knowledge, (ii) the relationship between the mental and the material, (iii) the nature of the self, (iv) the nature and possibility of free will, and (v) the nature of morality. *6 credits, HU, WR; HI, WR2, Fall, Winter—S Jansen*

PHIL 118. Freedom, Determinism, Responsibility If everything we do is determined by desires, instincts, and physical events in the brain, how can we be held responsible for any of our actions? The notions of freedom and responsibility are fundamental to our understanding of ourselves, yet there seems to be little room left for them by the way in which science explains our behavior. In this course we will inquire whether there is any room left for self-determination, agency, and responsibility given the causes of human action. Our discussion will be guided by readings from Plato, Aristotle, Descartes, and many other philosophers, dead and alive. *6 credits, HU, WR; HI, WR2, Winter—D. Vlahovic*

PHIL 210. Logic The study of formal logic has obvious and direct applicability to a wide variety of disciplines (including mathematics, computer science, linguistics, philosophy, cognitive science, and many others). Indeed, the study of formal logic helps us to develop the tools and know-how to think more clearly about arguments and logical relationships in general; and arguments and logical relationships form the backbone of any rational inquiry. In this course we will focus on propositional logic and predicate logic, and look at the relationship that these have to ordinary language and thought. *6 credits, ND; NE, FSR, Fall—J. Decker*

PHIL 212. Epistemology Do you know that you're not just a brain, floating in a vat, receiving stimulations through electrodes? Or perhaps an immaterial soul being conned by a malicious demon? In this course, we will use these skeptical worries as a launching point for thinking about epistemological issues: What exactly is knowledge? Do we ever have it? If so, when, and how? We will approach these questions through an examination of theories of epistemic justification,

including foundationalism, coherentism, internalism, externalism, and virtue epistemology. We will then consider some critiques of traditional epistemology, including feminist epistemology and naturalized epistemology. *6 credits, HU, WR; HI, WR2, Offered in alternate years, Winter—J. Decker*

PHIL 229. Philosophy of Film and Emotion As moviegoers we have all had that wondrous experience of gasping, laughing or sniffing in response to fictional scenarios. This phenomenon raises several philosophical questions, to be explored in this class: (1) How do fictional situations arouse our emotions, and why do we care about the lives of fictional film characters? (2) Why do we enjoy films which evoke unpleasant emotions, like fear or sadness? (3) Why do we feel suspense even when we know a film's ending? (4) What is the difference between the emotions we experience in real life and the emotions we experience in the movie theater? Prerequisite: One 100 level course in Philosophy or permission of the instructor. *6 credits, HU, WR; HI, WR2, Spring—S. Jansen*

PHIL 243. Animal Ethics: The Moral Status of Animals Do non-human animals have moral status, or are our moral obligations confined to human animals? Are our practices regarding animals morally justified? We shall explore these questions through an examination of different ethical theories. Utilitarians argue that the interests of non-human animals should be part of our moral calculus, because non-human animals can suffer pain. Deontologists extend moral rights to non-human animals, on the grounds that non-human animals are subjects of life and are therefore inherently valuable. In contrast, virtue ethicists emphasize that we share a common form of life with animals and that treating them compassionately constitutes human virtue. *6 credits, HU, WR; HI, WR2, Fall—S. Jansen*

PHIL 270. Ancient Greek Philosophy: Virtue, Reality and Explanation This limited survey of ancient Greek philosophy will center around its three most prominent figures (i.e. - Socrates, Plato and Aristotle) and their positions on the following topics: (1) virtue: What is virtue? Why be virtuous? Is/How is virtue taught? (Ethics segment) (2) reality: What are the basic constituents of reality? What is being? (Metaphysics segment) (3) explanation: What are the principles of change? What are the principles of the universe? (Physics and Cosmology segment). When appropriate, we shall also consider how these thinkers' positions compare and contrast to the views of their contemporaries and predecessors. Prerequisite: One 100 level course in Philosophy or permission of the instructor. *6 credits, HU, WR; HI, WR2, Spring—S. Jansen*

PHIL 272. Modern Philosophy: Knowledge, God and Free Will Is there any such thing as innate knowledge, or does all knowledge derive from the senses? Does God exist? If so, can we prove God's existence? Do human beings have free will? Philosophers of the 17th and 18th centuries tackled these perennial questions, providing a new understanding of our world, our place in it and our knowledge of it. We address these questions through examining and evaluating the views of such philosophers, including Descartes, Spinoza, Locke, Hume and Kant. Prerequisite: One 100 level course in Philosophy or permission by the instructor. *6 credits, HU, WR; HI, WR2, Winter—S. Jansen*

PHIL 395. Metaphysical Themes in Aristotle An examination of Aristotle's views on metaphysical problems about categories, substance, change, causation, place, time, the nature of being, the constitution of concrete particulars, and the existence and nature of God by way of a close reading of critical texts from the *Categories*, the *Physics*, and the *Metaphysics*. *6 credits, HU, WR; HI, WR2, Fall—M. Loux*

PHIL 395. Controversy and Consensus Controversy can be found in every corner of our intellectual lives. What are the epistemic and metaphysical implications of all this disagreement? How, if at all, should we revise our beliefs in light of our disagreements with others? If we refuse to revise, are we being irrational, or just intellectually bold? Does our failure to arrive at consensus opinions in a domain (perhaps even ideally) have any metaphysical implications (e.g., does it suggest metaphysical anti-realism in the domain)? These are some of the questions that we will explore (and likely disagree about) in this seminar. Prerequisite: Two previous courses in philosophy. *6 credits, HU; HI, Winter—J. Decker*

PHYS 165 Introduction to Electricity, Magnetism, and Optics A study of the principles of electricity, magnetism, and optics with an emphasis on real-world applications including electronics, laser physics, astronomy, and medicine. Topics include electric and magnetic fields, electric potentials, DC and AC circuits, geometric and wave optics, and relevant properties of matter. Designed for science majors who want additional background in physics. Comfort with algebra and the integration and differentiation of elementary functions is assumed. One laboratory per week. *6 credits, MS, LS, QRE, Winter—M. Baylor*

PHYS 335. Quantum Mechanics An examination of the structure of non-relativistic quantum mechanics and how this theory differs from those of classical physics. Topics include the mathematics of Hilbert space, the postulates of quantum mechanics, the motion of a particle in one dimension (including the free particle and the simple harmonic oscillator), the Heisenberg uncertainty principle, and spin. Multidimensional applications will include the harmonic oscillator, the hydrogen atom. Approximation techniques and applications will be presented. Prerequisite: Physics 228, 229/230 and Mathematics

232. Familiarity with matrix algebra is assumed. *6 credits, MS; NE, Winter—B. Titus*

PHYS 345. Advanced Optics This is a laboratory course that will serve as a follow-up to material covered in Physics 344, Classical and Quantum Optics. Students will conduct a number of experiments pertaining to optical phenomena. The experiments will display effects pertaining to classical, quantum, and non-linear optics. The lab will take place once a week for four hours each session. Prerequisite: Physics 344 is a pre-requisite or co-requisite. Physics 345 can be taken concurrently with Physics 344. *2 credits, MS; LS, QRE, Offered in alternate years, Winter—M. Baylor*

PHYS 346. Thermodynamics and Statistical Mechanics The fundamentals of classical thermodynamics and statistical mechanics. Topics include the laws of thermodynamics; heat engines and refrigerators; the Maxwell-Boltzmann distribution; the various canonical distributions; the statistical concepts of temperature and entropy; Fermi-Dirac, and Bose-Einstein distributions with applications to black-body radiation, phonons, and electrons in solids; the Ising model; and an introduction to critical phenomena. Prerequisite: Physics 228. *6 credits, MS; NE, Fall—Staff*

PHYS 355. Topics in Advanced Classical Mechanics Lagrangian and Hamiltonian methods including central force motion, coupled harmonic oscillators, and the study of continuous systems. Additional subjects may include fluid dynamics, classical field theory or other specialized topics. Prerequisite: Physics 229 and 230. *6 credits, MS; NE, Offered in alternate years, Fall—Staff*

POSC 100. Media and Electoral Politics in the 2012 Election This seminar introduces basic methods of political analysis through a case study of media and politics in the 2012 elections. Students will participate in a study of election advertising. Concepts from public opinion analysis and political psychology will be used to understand the 2012 campaigns. Our work will focus on content analysis of the effects of campaign ads and news coverage. *6 credits, AI, WR1, Fall—B. Allen*

POSC 204. Media and Electoral Politics: 2012 United States Election Our analysis of media influences on politics will draw from three fields of study: political psychology, political behavior and participation, and public opinion. Students will conduct a study of the effects of campaign ads and news using our multi-year data set of content analyzed election ads and news. We study a variety of quantitative and qualitative research methods to learn how political communication affects US elections. *6 credits, SS; SI, IDS, QRE, Offered in alternate years, Fall—B. Allen*

POSC 208. The American Presidency A study of the contemporary presidency, with a focus on the development of the institutional presidency, presidential personality, and the presidency's relations with other institutions in the American and international political systems. Particular attention will be devoted to the presidencies of Barack Obama and George W. Bush. *6 credits, SS; SI, IDS, Offered in alternate years, Spring—S. Schier*

POSC 221. Latin American Politics Comparative study of political institutions and conflicts in selected Latin American countries. Attention is focused on general problems and patterns of development, with some emphasis on U.S. Latin American relations. *6 credits, SS, IS, SI, Spring—A. Montero*

POSC 235. The Costs of Conflict This course explores the variety of ways that war and conflict are costly to society and individuals. The implications of costliness are explored abstractly through the bargaining and war literature. We follow that with an examination of the empirical work on how war is costly to participant states and what variables affect those costs. We will briefly touch on the economic effects of war before studying the effect war has on citizens, both collectively and individually, ending with a discussion of how contemporary conflict changes the lives of those who experience it. *6 credits, SS; SI, IS, Winter—A. Von Hagen-Jamar*

POSC 244. The Politics of the Celtic Fringe This class will examine recent political, economic and social transformations that have occurred in the so-called Celtic Fringe: Scotland, Ireland, Cornwall, Wales and Galicia. We will use these regions, which have long occupied marginal positions within much larger and more powerful states, as cases to explore a variety of issues, including center-periphery relations, migration, internal colonialism, autonomous and separatist movements, and regionalism in the context of the European Union. *6 credits, SS; SI, IS, Spring—D. Gupta*

POSC 261. Power, Freedom, and Resistance This course will explore different ways in which Foucault sees power, not as domination and violence, but as necessarily connected to freedom, courage, and a culture of self-criticism. It will also explore Arendt's conception of freedom as being intrinsic to the human condition and her conception of power as form of concerted action, of solidarity. The main aim of the course will be to bring these two thinkers in dialogue with each other in ways that highlight that power requires freedom, while freedom has no reality in the absence of the actual capacities of the political subjects for free action. *6 credits, SS; HI, IS, Offered in alternate years, Fall—M. Czobor-Lupp*

POSC 265. Capitalist Crises, Power, and Policy This course examines the interaction of national politics and international economic activity. Topics include the relationship between national and international finance, global

competitiveness, and economic development. Case studies drawn from every continent. 6 credits, SS; SI, IS, QRE, Offered in alternate years, Winter—**A. Montero**

POSC 267. Comparative Foreign Policy Why do states act the way they do internationally? Why do some states act like "rogues" while others support the system? How do countries choose their allies or enemies? How do governments define their country's national interest and respond to global changes? Foreign policy is where internal politics and external politics intersect. Understanding any country's foreign policy requires that we pay attention to its position in the international system and its internal politics. In this course we will employ approaches from international relations and comparative politics to explore these questions across a range of countries. 6 credits, SS; SI, IS, Spring—**G. Marfleet**

POSC 333. Global Social Changes and Sustainability This course is about the relationship between social changes and ecological changes to understand and to be able to advance analytical concepts, research methods, and theories of society-nature interactions. How do livelihoods of individuals and groups change over time and how do the changes affect ecological sustainability? What are the roles of human institutions in ecological sustainability? What are the roles of ecosystem dynamics in institutional sustainability? Students will learn fundamental theories and concepts that explain linkages between social change and environmental changes and gain methods and skills to measure social changes qualitatively and quantitatively. 6 credits, SS, WR; SI, WR2, IS, QRE, Fall—**T. Myint**

POSC 350. Montesquieu Along with Hobbes, Locke, and Spinoza, Montesquieu was one of the great founders of modern liberalism. He was especially influential on American constitutionalism. Yet perhaps more than any of liberalism's others founders, Montesquieu grounded his teaching in a wide-ranging investigation of alternatives (including ancient alternatives) and in an exhaustive investigation of human nature. These features of his thought make him particularly useful to us, who may be seeking new-and perhaps nobler-possibilities for liberalism. In this course we will undertake a close reading of Montesquieu's most comprehensive book, *The Spirit of the Laws*. 6 credits, SS; HI, Winter—**L. Cooper**

POSC 351. Political Theory of Martin Luther King, Jr. This seminar will examine the speeches, writings, and life of Dr. Martin Luther King, Jr. Students will study King as an example of the responsible citizen envisioned by the theory expressed in *The Federalist*, as a contributor to the discourse of civil religion, and as a figure in recent American social history. 6 credits, SS, RAD; SI, IDS, Winter—**B. Allen**

POSC 356. Visions of History in Politics Storytelling is central to politics. Storytelling could be about the past (history as memory) or about the future (history as promise). The ways in which historical narratives are told shape political identities. They also provide different forms of political order with authority, contest political order, or aim to inspire it. This class will explore how different visions of history impact on politics and its aims. Readings will include Niccolo Machiavelli's *Discourses*, Hegel's *Philosophy of History*, Marx's *The Eighteenth Brumaire of Louis Bonaparte*, Arendt's *Between Past and Future*, Foucault's *Society Must be Defended*, and Derrida's *Specters of Marx*. 6 credits, SS; HI, IS, Offered in alternate years, Winter—**M. Czobor-Lupp**

PSYC 362. Psychology of Spoken Words This course explores the cognitive and perceptual processes that allow humans to understand and produce spoken words. We will review major findings on word perception and production, and then focus on specific topics including the perception of accents in speech, language disorders, the links between music and speech, the connection between sounds and meaning, the influence of gesturing on word production, slips of the tongue, bilingualism, tip-of-tongue-states (being temporarily unable to recall a word), and other related issues. Prerequisite: Psychology 110 or Linguistics 110. 6 credits, SS; SI, Fall—**J. Strand**

PSYC 382 Topics in Social and Personality: Endings This seminar will examine the psychology of endings, including endings associated with psychotherapy, social interactions, personal relationships, social roles, literature and the arts, and life itself. We will address when and how endings occur. How we experience endings, and what makes an ending a good or poor one, among other issues. 6 credits, SS, SI, Spring -- **N. Lutsky**

RELG 100. What Would Buddha Do? Exploring Buddhist Ethics The question of how to live a good life is among the most important and difficult we face as humans. This course will explore some of the answers provided by Buddhist traditions over their 2500-year history in Asia and, more recently, the West. Drawing on texts from South Asia, Tibet, China, Japan, and America, we will examine such issues as the relation between renunciation and social engagement; the nature of enlightenment; the validity of ethics in a world devoid of Self or God; and Buddhist views on such questions as sex, violence, money, human rights, and the environment. 6 credits, AI, WR1, IS, Offered in alternate years, Fall—**R. Jackson**

RELG 110. Understanding Religion This course offers an opportunity to reflect upon religion in human life. Sections vary with professors' aims, but all sections encounter material from more than one religious tradition, and probe theories of religion from several disciplinary perspectives. The study of individual quests highlights the personal dimension of

religion, while the examination of historical cases brings out its cultural and political dimensions. Issues of gender, power, and social location also receive attention. Although Religion 110 makes no attempt to survey the world's religions, it provides an introduction to aspects of religious life and to the academic field of religious studies *6 credits, HU, WR; HI, WR2, Fall—Staff*

RELG 153. Introduction to Buddhism This course offers a survey of Buddhism from its inception in India some 2500 years ago to the present. We first address fundamental Buddhist ideas and practices, then their elaboration in the Mahayana and tantric movements, which emerged in the first millennium CE in India. We also consider the diffusion of Buddhism throughout Asia and to the West. Attention will be given to both continuity and diversity within Buddhism to its commonalities and transformations in specific historical and cultural settings. We also will address philosophical, social, political, and ethical problems that are debated among Buddhists and scholars of Buddhism today. *6 credits, HU, RAD; HI, IS, Winter—A. Sango*

RELG 160 Hebrew Bible The central religious beliefs and moral values of ancient Israel will be explored both in relation to other ancient Near Eastern cultures and as the basis of later developments in Judaism and Christianity. Attention will also be given to the diversity of literary genres exemplified in the Hebrew Bible and to the problems of interpreting biblical texts. *6 credits, HU, WR, HI, WR2, Spring -- Brink*

RELG 221. Judaism and Gender Questions raised by feminism and gender studies have transformed religious traditions and dramatically changed the way scholars approach the study of religion. In this course, we will consider how reading Jewish tradition with attention to gender opens up new ways of understanding Jewish history, texts, theology and ritual. We will also consider how women and feminism have continually and newly envisioned Jewish life. We will interrogate how Jewish masculinity and femininity have been constituted through, reinforced by, and reclaimed/transformed in Jewish texts, law, prayer, theology, ethics and ritual, in communal as well as domestic contexts. *6 credits, HU, WR, RAD; HI, WR2, IDS, Winter—S. Sippy*

RELG 229. Images of God: Art and the Christian Tradition This course explores Christianity's complex and shifting relationship to image-making, beauty and the arts across the centuries. We read Christian theologies and philosophies of art, analyze Christian works of art and visit churches to consider the role of art in worship. Topics include: the beauty of God and the ugliness of Christ, incarnation and the theology of matter, image vs. idol, iconoclasm, beauty as a path to God, Christianity and censorship, art as co-creation with God, the artist as prophet. *6 credits, HU, WR; HI, WR2, Fall—P. Francis*

RELG 232. God and Desire This course explores the messy entanglements of desire for God and desire for earthly things, erotic relationships with the divine and those among human beings. We begin with Plato's conception of Eros, and then trace its disavowal and/or appropriation in the history of Christian thought and its reemergence in modern and postmodern Western thought, especially that informed by psychoanalysis. We explore the ways that the Christian ascetic and mystical traditions and psychoanalysis are allied discourses inasmuch as they are means of discerning and relating to the desires of the heart. *6 credits, HU, WR; HI, WR2, Spring—P. Francis*

RELG 235. Be a Man: Masculinity and Christianity From action figures to images of Jesus, masculinities are ever-present if seldom acknowledged. This course explores the changing conceptions of masculinity in Christianity and the West in relation to issues of gender and sexuality, and in debates around God, morality, and family. We consider recurring tropes in Christian and Western conceptions of masculinity, but pay particular attention to images of suffering male bodies--from the crucified Christ to Robert Mapplethorpe's photographs. How do such images reinforce notions of male "toughness" and how do they reveal the vulnerability of male bodies and the agency--perhaps the redemptive power--of such vulnerability? *6 credits, HU, WR; HI, WR2, IDS, Winter—P. Francis*

RELG 250. Buddhism and Ecology Both environmental scholars and activists have been vigorously discussing the role that religion plays in shaping our attitudes towards the environment. In this course, we carry on this conversation through a unique vantage point, Buddhism. Western environmentalists often assume Buddhism to be "eco-friendly." Together, we will critically rethink this benign image, exploring the parallels and the divergences between Buddhism and ecological practice, as well as the problems and the prospects of Buddhist environmentalism. *6 credits, HU, WR, HI WR2, Spring — A. Sango*

RELG 259. Gandhi Mohandas Gandhi was among the most controversial and influential figures of the twentieth century. Whether as anti-colonial revolutionary, philosopher of non-violent resistance, proponent of social and religious tolerance, or reformer of Hindu traditions, he left a mark not only on India, but on the world at large. This course will seek to understand the complex relation among Gandhi's religious, social, and political stances. We will explore the religious and cultural sources of his ideas, the way they played out in real historical events, and the influence they have had, in India and elsewhere, in the six decades since his death. *6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Spring—R.*

Jackson

RELG 278. Thoreau Carefully reading Henry David Thoreau's work reveals an unmistakable religious aspect to his social and political philosophy. He watches nature. He reads religious scripture. He might be a lay monk. His sojourn at Walden's Pond, for instance, was as much a spiritual retreat as anything else. Course participants will read Thoreau's major texts and major texts about Thoreau in order to make sense of how Thoreau's romantic theology undergirds his conceptions of moral rightness, the human person, individual moral responsibility, and political obligation. Through engaging Thoreau, course participants will gain a better understanding of Transcendentalism, abolitionism, and Gandhian nonviolence. *6 credits, HU, WR; HI, WR2, Winter—T. Wiley*

RELG 325. Ritual, Transformation, Tradition Ritual connotes patterns and adherence to traditional pasts, and yet the workings of ritual often imply intentions to effect change, invoking the power of ritual transformation. In this, the study of ritual invokes central tensions animating the study of religion: continuity and change, social stability and transformation. This course explores "ritual" and "tradition" from a range of scholarly perspectives: theoretical; textual; anthropological; textual; sociological; political; and psychological. Working at the level of the individual and communal, or the cosmic and political, we will consider the processes of ritual preservation and innovation. *6 credits, HU, WR, RAD; HI, WR2, IDS, Spring—S. Sippy*

RUSS 261. Lolita Rejected by every major publisher to which the author submitted it, first published in France in 1955 by a press known for pornographic trash, Vladimir Nabokov's scandalous novel of a middle-aged college professor obsessed with a twelve-year-old girl continues to feed controversy as well as to challenge and delight readers with its labyrinthian narrative, endless wordplay, innumerable meta-artistic allusions, and troublesome eroticism. Thus warned, you are invited to join the jury in deliberating the designs and delights of this twentieth-century literary classic. Conducted in English. *3 credits, AL, WR; LA, WR2, Winter—D. Nemeč Ignashev*

SOAN 100. Historical Archaeology: Materializing Race, Gender, and Ethnicity What stories can we tell through the foods we eat and the ways in which we prepare them, the layout of our neighborhoods, or even the things we throw away? In this course we will examine how historical archaeology and its study of these "small things forgotten" can enhance our understanding of the past and reveal new stories about those individuals and communities who have traditionally been excluded from mainstream histories. As a first year seminar this course is designed to help students develop a critical understanding of the ways in which we materialize race, gender, ethnic and other social relationships. *6 credits, AI, WR1, Fall—S. Gonzalez*

SOAN 114. Modern Families: An Introduction to the Sociology of the Family What makes a family? How has the conception of kinship and the 'normal' family changed over the generations? From single moms (and dads) to tiger moms, how do race and gender intersect this institution? In this introductory class, we examine these questions, drawing on a variety of course materials ranging from classic works in sociology to contemporary blogs on family life. We will focus on diversity in family life, paying particular attention to the intersection between the family, race and ethnicity, social class, and sexuality. The course includes several writing assignments, including a sociological analysis of one's own family biography. *6 credits, SS, WR; SI, WR2, Spring—E. Raleigh*

SOAN 227. Masculinity, Gender and Difference The study of gender is often assumed to be the study of women yet sociologists analyze gender as a social construct that equally includes the study of masculinity and men. In this course, we will examine how masculinities are constructed, as well as how masculinity as a construct operates in institutions, interactions and identities. We will specifically consider how masculinity informs education, the workplace, the family, and popular culture. In all of these areas, we will examine how masculinity intersects with and is modified by categories of difference such as race, nationality, class, and sexuality. *6 credits, SS; SI, IDS, Fall—D. Williams*

SOAN 239. Explorations in Social Data Analysis What does it mean if something is statistically significant? Why does it matter? This course will ask and answer these questions by providing social science students with the basic statistical tools for data analysis and interpretation. The course covers the foundations of univariate and inferential statistics up to regression. Using the statistical program SPSS, we'll focus much more on learning to apply social statistics and how to make sense of the findings, rather than statistical theory. No prior knowledge of statistics is required. *6 credits, SS; FSR, QRE, Fall—E. Raleigh*

SOAN 267. Indigenous Archaeology: New Pathways for Collaborative Research Since the passage of the Native American Graves Protection and Repatriation Act in 1990 archaeologists have attempted to develop more ethical and

equitable relationships with Native American communities. Following indigenous critiques of archaeology, this course will consider the value of indigenized approaches to the study of Native American history and heritage. Through our discussions we will situate the practice of research on and about Native Americans in terms of its unique social, historical, and legal contexts, examining how contemporary dialogues about Native sovereignty, cultural property, and Indigenous identity intersect with the methods we use to represent Native North America. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. *6 credits, SS; SI, IDS, Spring—S. Gonzalez*

SOAN 272. Race and Ethnicity in the United States With the election of President Obama, many pundits declared we are now in a post-racial society. However, as social scientists, we know race continues to shape our lives. This course provides an overview of the study of race and ethnicity through a sociological framework. Primarily, we analyze race through the lens of inequality, analyzing how race intersects with gender and class to shape identity and opportunity. We also explore how racial groups are represented in the media. In addition, we examine the fluidity of racial categories, concluding with a discussion of interracial unions and the multiracial population in the US. *6 credits, SS; SI, IDS, Winter—E. Raleigh*

SOAN 396. Advanced Sociological and Anthropological Writing This course explores different genres of writing and different audiences for writing in the social sciences, but it focuses particular attention on scholarly articles published in professional journals in sociology and anthropology. To that end, students both analyze sociological and anthropological articles (as facilitated by the instructor and guest presenters) and work on their own academic writing process (with the help of peer-review and instructor feedback). The writing itself is broken down into component elements (e.g., introductions, literature reviews, thesis statements, methods statements, presentation of argument with evidence, conclusions, and abstracts) on which students practice and revise their work. *6 credits, SS, WR, SI, WR2 – P. Feldman-Savelsberg*

Feldman-Savelsberg

SPAN 255. Women Dramatists in Latin America: Staging Conflicts This course examines contemporary plays written by Latin American women from a gendered perspective. Issues range from women and political repression to a critique of gender roles. As we read the plays, we will consider both the literary qualities of dramatic texts and the semiotics of staging and its potential for reconceptualizing women's roles in Latin American society and culture. Possible dramatists are Luisa Josefina Hernández, Rosario Castellanos, Griselda Gambaro, Elena Garro, Sabina Berman, Susana Torres Molina, Marcela del Río. Prerequisite: Spanish 204 or proficiency. *6 credits, AL, RAD; LA, IS, Winter—B. Boling*

SPAN 321. Murder as a Fine Art: The Detective Novel in Latin America We will study the socio-historical factors that gave rise to the genre as well as some of its classical predecessors (Poe, Chandler). We will then turn our attention to some prominent heirs of this genre in Latin America (Borges, Piglia, Bolaño) and end by studying why in contemporary Central American literature the genre is enjoying a resurgence (Menjívar, Castellanos Moya and Rey Rosa). We will study the specific traits the genre has adopted in Latin America and how it has become a mirror that often reflects the political and social realities confronting the region, particularly in Central America. Prerequisite: Spanish 205 or above. *6 credits, AL, RAD; LA, IS, Winter—Y. Pérez*

SPAN 349. Spanish Seminar in Madrid: Theory and Practice of Urban Life More than a study of the image of Madrid in Spanish literature, this course examines the actual experience of living in a cosmopolitan city through a variety of disciplines, including Urban Studies, Philosophy, Architecture, Sociology, and Spanish poetry and fiction. *6 credits, AL, RAD; LA, IS, Fall—H. Huergo*

SPAN 371. Yours Truly: The Body of the Letter This course will focus on letters and their significance as acts of symbolic and material exchange, as objects that bear the mark of the bodily act of writing, and as a staging of the scene of writing itself. We will study different types of letters (love letters, secret letters, literary letters, letters imbedded in other texts, etc.), but always as the site of production of a modern and gendered self. Letters by: Flora Tristan, Victoria Ocampo, Teresa de la Parra, Virginia Woolf, Rosa Luxemburg, Simone de Beauvoir and theoretical texts by Monsiváis, Chartier, Bouver, Derrida, Deleuze and Guattari, among others. Prerequisite: Spanish 205 or above. *6 credits, AL, RAD; LA, IS, Offered in alternate years, Spring—S. López*

THEA 237. Scenic Design for the Performing Arts This course will focus on the art and practice of creating scenic designs for the performing arts. It will introduce basic design techniques while exploring the collaborative process involved in bringing scenery from concept to the stage. The course will include individual and group projects utilizing collage, sketching, and model-making. *3 credits, AL; ARP, Spring—J. Stanley*

WGST 215. Feminist Practices, Activism and Social Change This course introduces students to the study of feminist practices. What is the relationship of feminist theory to feminist practice? What is feminist activism? What tactics and strategies have feminist individuals and collectives undertaken for social change? How have some strategies been

successful, while others have failed? Through a set of course readings and open small-group dialogue the course will look at a variety of tactics and strategies feminists have undertaken for social change. The course will enable students to experiment with some strategies, learn through the process of doing and reflect on theory and practice through hands-on learning projects. *6 credits, SS, RAD; SI, IDS, Spring—A. Garrido*

WGST 315. Queer Ethnographies Across Latin America and the Caribbean This course focuses on the history and culture of non-normative gender and sexualities across Latin America, the Caribbean and its diaspora. Our focus will question the changing meanings and boundaries of gender and sexuality and their dynamics with race, sex and class across the continent, through the exploration of queer ethnographies primarily. Students will complete the course with a more complex understanding of the historical and cultural embeddedness of sexual identities, practices and communities in the Americas. *6 credits, SS, RAD; SI, IS, Winter—A. Garrido*