THE JOHNS HOPKINS UNIVERSITY

2012-2013

SPRING TERM
UNDERGRADUATE

SCHEDULE OF COURSES

as of October 29, 2012

ARTS AND SCIENCES

AND

ENGINEERING

For current offerings go to
https://isis.jhu.edu/classes/

To view course offerings:
Choose the bookmark icon.
Select Arts and Sciences or Engineering
to view by department.

Anthropology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.309	01	H		**Gifts and Thefts in the Middle Ages** *Danford, Rachel Elizabeth* Why were some medieval objects valued as gifts, others appropriated as spolia, and still others taken by force? How does transferring objects from one cultural context into another change their meaning? Western, Byzantine, and Islamic art, 6th-13th centuries.	3.00	25	MW 12:00-1:15PM
AS.010.327	01	H	W	**The Harem and the Veil: Space and Gender in the Islamic World** *Brown, Rebecca Mary* This course explores the constructed imagery of the harem and the veil in relation to politics and visual culture in the Middle East, North Africa, India, and Euro-America. Topics will include: Ottoman palace architecture, Orientalist painting, mandating/banning the veil, Islamic feminisms. We will address visual culture broadly, including advertising, architecture, contemporary art, film, news media.	3.00	15	T 3:00-5:30PM
AS.070.113	01	HS		**Freshman Seminar** *Haeri, Niloofar* An introduction to Africa, artistic creativity, collection and exhibition: as Students will be introduced to anthropology through ethnographic films and selected readings in anthropology.	2.00	35	W 1:30-3:30PM
AS.070.132	01	HS	W	**Invitation to Anthropology** *Poole, Deborah* Through readings that explore how anthropologists study such issues as race, gender, migration, territory, and the environment, this course introduces students to anthropology as a field of research and reflection that interrogates what it means to be human.Cross-listed with Humanities Center and PLAS.	3.00	75	TTh 12:00-1:15PM
AS.070.262	01	HS		**Cuban Intellectuals, Cinema, and the State** *Humphreys, Laura Zoe* This course examines the relationship between intellectuals and the Cuban state, focusing on how cinema and other arts have been mobilized both as propaganda and as sites for social criticism.Cross-List: Film and Media Studies; PLAS; GRLL Special Notes Spring 2013: Screenings are required for this course and will take place on Tuesdays from 7 pm to 9:30 pm.	3.00	20	Th 1:30-3:50PM; T 7:00-9:30PM
AS.070.268	01	HS	W	**Anthropology of Health and Disease** *Han, Clara* This course offers a wide-ranging study of the problems of disease and health, including the areas of birth and reproduction, poverty and local ecologies of care, death and dying, and sexuality. Considering these areas across world regions, this course invites students to question the lines of normal and abnormal, the margins of institutions, the measures of success in global health, and the transformation of living and dying in relation to violence, institutional failure, and new technologies.	3.00	60	TTh 10:30-11:45AM

Anthropology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.070.304	01	HS	W	**Child Adoption and Family Making** *Reyes Kipp, Anaid Citlalli* Dean's Teaching Fellowship Course. The course takes child adoption as a starting point to critically explore how kinship and family are connected to legal practices, technological innovations, and broader historical, political, and socio-economic processes. Cross List: WGS, PLAS.	3.00	15	M 4:00-6:20PM
AS.070.317	01	HS	W	**Junior/Senior Seminar** *Obarrio, Juan M* Classical and contemporary ethnographies of the political in Africa. Issues of power, hierarchy and symbol. Articulations of state, ethnicity and community. Relations between law and violence through war, custom and ritual. Africa as a key locus and source of political anthropology. Modes of ethnographic fieldwork and writing. Colonial trajectories and postcolonial detours; politics of the past and the future.	3.00	15	T 1:30-3:50PM
AS.070.331	01	HS	W	**Anthropology of Poetry and Prayer** *Haeri, Niloofar* What kind of activity is prayer? Are we talking to God(s), to our ancestors, to ourselves? What do poetry and prayer share? The course will explore these and similar questions with particular attention to questions of repetition, memory, meaning and presence.	3.00	20	M 1:30-3:50PM
AS.070.414	01	HS		**Kinship at the Core** *Goodfellow, Aaron* It is often said that the study of kinship defines anthropology as a distinct discipline within the social sciences. This course tracks the emergence of kinship as a subject and object of anthropological inquiry, and traces some of the transformations that mark the effort to develop theories of kinship (genealogical method, social contract, structural-functionalism, structuralism, psychoanalysis, etc). A sample of authors to be read include: Morgan, Rivers, Malinowski, Radcliff-Brown, Leach, Levi-Strauss, Pateman, Schneider, Trawick, and Povinelli. Open to Graduate Students.	3.00	15	TTh 9:00-10:15AM
AS.070.416	01	HS		**Visual Languages in Medical Knowledge** *Das, Veena* This interdisciplinary course will track the mediation of images in the making of medical knowledge and show how sensory knowledge is incorporated or transformed in the process. Open to Graduate Students Co-listed with 211.416 and 214.616	3.00	15	W 4:00-6:20PM
AS.070.420	01	HS		**Anthropology of Death and Dying** *Das, Veena* This course is organized around understanding the experience, representation and management of death and dying at different scales of social life connecting individual biographies with institutional settings.	3.00	15	Th 4:00-6:30PM
AS.130.177	01	HS		**World Prehistory** *Harrower, Michael James*	3.00	80	TTh 9:00-10:15AM

Anthropology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				An introduction to the archaeology of pre- and protohistoric cultures in key regions of the world, from the Neolithic revolution to the rise of complex societies. Discussions will focus on how they interacted with their neighbors, how this interaction would have played a part in their development, and the different approaches archaeologists use to understand their interconnections. Regions to be examined include the Near East, the Aegean, East Africa, East Asia, the Andes, and Central America. Cross-listed with Anthropolgy			
AS.140.425	01	HS		**Individualized Medicine from Antiquity to the Genome Age** *Comfort, Nathaniel* Prereqs: 140.105, 140.106 A seminar for graduate students and advanced undergraduates. We will explore the notion of the individual in medicine over 25 centuries, from the Hippocratics to the invention of the case study during the Renaissance to the genetic, biochemical, and immunological individual in recent biomedicine. Cross-listed with Anthropology and History.	3.00	12	M 3:00-5:20PM
AS.211.237	01	H		**Literature and Medicine** *Strowick, Elisabeth* Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).	3.00	25	MW 12:00-1:15PM
AS.211.394	01	H	W	**Brazilian Cult & Civ** *Bensabat Ott, Mary M*	3.00	35	M 2:00-4:20PM

Anthropology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is intended as an introduction to the culture and civilization of Brazil. It is designed to provide students with basic information about Brazilian history, art, literature, popular culture, theater, cinema, and music. The course will focus on how indigenous Asian, African, and European cultural influences have interacted to create the new and unique civilization that is Brazil today. The course is taught in English, but ONE extra credit will be given to students who wish to do the course work in Portuguese. Those wishing to do the course work in English for 3 credits should register for section 01. Those wishing to earn 4 credits by doing the course work in Portuguese should register for section 02. The sections will be taught simultaneously. Section 01: 3 credits Section 02: 4 credits (instructor's permission required)			
AS.211.394	02	H	W	**Brazilian Cult & Civ**	4.00	20	M 2:00-4:20PM
AS.213.237	01	H		**Literature and Medicine** *Strowick, Elisabeth* Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore "illness as metaphor" (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard's "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).	3.00	25	MW 12:00-1:15PM

Art

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.371.131	01			**Studio Drawing I** *Hankin, Craig* Attendance at 1st class is mandatory. This course focuses on developing fundamental drawing skills for the student with little or no previous studio experience. Basic concepts of form and composition will be taught through exercises based on the book, Drawing On The Right Side Of The Brain, and with the aid of still-life setups and live models.	2.00	15	T 1:30-4:50PM
AS.371.133	01			**Painting Workshop I** *Hankin, Craig* Prereq: 371.131 or instructor's permission. This course offers the fundamentals of oil painting techniques for the serious student with minimal prior studio experience. Observational skills are taught through the extensive use of still-life setups, with particular attention paid to issues of light, color, and composition. Slide lectures and a museum trip give students an art historical context in which to place their own discoveries as beginning painters.	2.00	12	W 1:30-4:50PM
AS.371.133	02			**Painting Workshop I** *Gruber, Barbara*	2.00	12	M 1:30-4:50PM
AS.371.136	01			**Drawing: The Portrait** *Hankin, Craig* An intensive look at the traditions and techniques of portrait drawing. Students work from live models in a variety of media and study master portraits by Holbein, Rembrandt, Ingres, Degas, etc. Trips to BMA Print & Drawing Room and JHU Archaeological Museum will enhance knowledge and appreciation of the history and traditions of portraiture.	2.00	15	Th 1:30-5:00PM
AS.371.140	01	H		**Cartooning** *Chalkley, Thomas* Not open to Freshmen. A history-and-practice overview for students of the liberal arts. The conceptual basis and historical development of cartooning is examined in both artistic and social contexts. Class sessions consist of lecture (slides/handouts), exercises, and ongoing assignments. Topics include visual/narrative analysis, symbol & satire, editorial/political cartoons, character development, animation. Basic drawing skills are preferred but not required.	3.00	15	M 1:30-4:20PM
AS.371.151	01	H		**Photoshop/Dig Darkroom** *Ehrenfeld, Howard*	3.00	10	M 10:00AM-12:50PM

Art

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Photoshop is not only the digital darkroom for processing images created with digital cameras; it is also a creative application for making original artwork. In this course, students use Photoshop software as a tool to produce images from a fine art perspective, working on projects that demand creative thinking while gaining technical expertise. Students will make archival prints, have regular critiques, and attend lectures on the history of the manipulated image and its place in culture. We will look at art movements which inspire digital artists, including 19th century collage, dada, surrealism, and the zeitgeist of Hollywood films. Students must have a digital camera. Prior knowledge of Photoshop is not required. Attendance at first class is mandatory.			
AS.371.152	01	H		**Introduction to Digital Photography** *Ehrenfeld, Howard* Introduction to Digital Photography Students learn to use their digital cameras through a variety of projects, which will help them develop technical and creative skills. Students explore documentary, landscape and portrait photography. Critiques and slide lectures of historic photographs, which range from postmortem daguerreotypes to postmodern digital imagery, help students develop a personal vision. Students gain camera proficiency with one-on-one instruction in the field. Basics for print adjustment and output will be covered. Attendance at first class is mandatory.	3.00	10	T 10:00AM-12:50PM
AS.371.154	01			**Introduction to Watercolor** *Ober, Caroline* Watercolor is simultaneously the most accessible of all painting media and the most misunderstood. This course provides experience and instruction in observational and expressive watercolor techniques, materials, concepts, and vocabulary. Topics to be reviewed include line, perspective, value, texture,composition, color, and pictorial space. There will be an introduction to contemporary practices in watercolor, as well as experimental and abstract exercises, collage, and conceptual work.	2.00	12	Th 4:00-7:00PM
AS.371.155	01			**Introduction to Sculpture** *Premo, Larcia C.* Seniors only or permission required. A studio course introducing students to sculptural concepts and methods. Emphasis is on the process of creating. Even the simplest materials can effectively activate space, convey meaning and elicit emotion when used thoughtfully and imaginatively. Students will learn different methods including additive and reductive techniques, construction, modeling and mold-making. No prerequisites except a willingness to experiment, make mistakes...and clean up when you are done.	2.00	12	T 1:30-4:30PM
AS.371.162	01	H		**Black & White: Digital Darkroom** *Berger, Phyllis A*	3.00	10	W 10:00AM-12:50PM

Art

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				In this digital course, students explore the beauty, evocative nature and artistry inherent in black and white photography. They develop camera skills on numerous field trips including Ladew Topiary Gardens, the John Brown Liberty Ship and an optional weekend trip to Cape Henlopen State Park in Delaware. Students meet frequently for critiques and discussions based on historic and contemporary imagery. They will learn to use Photoshop and Nik Silver Efex for image adjustment. Techniques such as high dynamic range, infrared, and panorama will be covered. Students work on a project of their choice and produce a portfolio of ten prints. Digital SLRs are provided. Attendance at 1st class is mandatory.			
AS.371.162	02	H		**Black & White: Digital Darkroom**	3.00	10	W 2:00-4:50PM
AS.371.165	01	H		**Location Photography** *Ehrenfeld, Howard* Working in the studio and in various locations, students will learn the fundamentals of lighting interiors and strategies for working in almost any environment. Field trips will include the National Aquarium, Evergreen Museum & Library, a Howard County horse farm, a Tiffany-designed church and a Hampden photo studio. Students will also concentrate on the fine art of printing in our new digital lab. They will develop a final portfolio of 10 photographs which express a personal vision about a location of their choice. A basic knowledge of digital photography is helpful, but not required.	3.00	10	T 1:30-4:20PM
AS.371.303	01	H		**Documentary Photography** *Berger, Phyllis A* Attendance at first class is mandatory. In this course, we will explore different genres of documentary photography, including the fine art document, photojournalism, social documentary photography, the photo essay and photography of propaganda. Students will work on a semester-long photo-documentary project on a subject of their choice. Digital SLRs will be provided.	3.00	10	F 10:00AM-1:00PM
AS.371.303	02	H		**Documentary Photography**	3.00	10	F 2:00-4:50PM

Behavioral Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.020.152	01	N		**General Biology II** *Pearlman, Rebecca Shari* Section 01: Not open to Freshmen. Section 02: Open to Freshmen only. This course builds on the concepts presented and discussed in General Biology I. The primary foci of this course will be on the diversity of life and on the anatomy, physiology, and evolution of plants and animals. There will be a special emphasis on human biology. The workshops that were introduced in 020.151 General Biology I will include the use of simulation software, a critique of the primary literature, and an exploration of current trends in medicine. Prereq: AS.020.151 Cross-listed with Behavioral Biology	4.00	200	MWF 12:00-12:50PM; T 12:00-12:50PM
AS.020.152	02	N		**General Biology II** *Roberson, Christov*	4.00	200	TTh 12:00-1:20PM
AS.080.330	01	N	W	**Brain Injury & Recovery** *Gorman, Linda K* Prereq: (080.305 & 080.306) or (020.312 and 020.306) or (200.141 and 020.306) or Permission of Instructor. This course investigates numerous types of brain injuries and explores the responses of the nervous system to these injuries. The course's primary focus is the cellular and molecular mechanisms of brain injury and the recovery of function. Discussions of traumatic brain injury, stroke, spinal cord, and tumors, using historical and recent journal articles, will facilitate students' understanding of the current state of the brain injury field. Cross-listed with Psychological and Brain Sciences and Behavioral Biology	3.00	30	WF 10:30-11:45AM
AS.200.141	01	NS		**Foundations of Brain, Behavior and Cognition** *Gorman, Linda K* Formerly listed as Introduction to Physiopsychology. A survey of neuropsychology relating the organization of behavior to the integrative action of the nervous system. Cross-listed with Behavioral Biology and Neuroscience.	3.00	250	TTh 9:00-10:15AM
AS.200.208	01	NS		**Animal Behavior** *Madison, Farrah* Examines basic principles of animal behavior (orientation, migration, communication, reproduction, parent-offspring relations, ontogeny of behavior and social organization). Evolution and adaptive significance of behavior will be emphasized.	3.00	180	TTh 9:00-10:15AM
AS.200.328	01	S	W	**Thry-Mthds/Clinical Psyc** *Edwin, David H* A critical examination of the methods of observation, description, reasoning, inference, measurement and intervention that underlie the clinical practice of psychology and psychiatry. Cross listed with Behavioral Biology. Prereq: 200.212; Junior and Senior Psychology, Behavioral Biology and Cognitive Science majors only OR instructor approval.	3.00	25	M 6:00-8:20PM

Behavioral Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.290.303	01			**Brain, Communication & Evolution** *Madison, Farrah* The study of animal communication involves the study of neural and hormonal mechanisms mediating the production of communication signals and the evolutionary function of the different signals animals produce to communicate with one another. In this course, information from both of these approaches to the study of behavior will be integrated to provide a comprehensive examination of the causes and functions of different animal communication systems. Topics will include both a consideration of the mechanisms of signal production and of signal perception. The course will review the basic features of communication and features of signaling systems. We will also discuss neural and endocrine functioning and the fundamentals of evolutionary theory relevant to the study of animal communication. Finally, this course will include a field component where students will quantify different aspects of communicative behaviors including song, mating, and parental behavior in several species. Prereqs. AS.200.141 OR AS.200.208 OR AS.080.305	3.00	19	WF 9:00-10:15AM
AS.290.420	01	S	W	**Human Sexual Orientation** *Kraft, Chris S* Limited to Juniors & Seniors with PBS, Neuroscience, Public Health, Cog. Sci., Behaviorial Biology, and Biology majors, or Juniors and Seniors with PBS or Women's Studies minors. This course will examine the historical and current theories of sexual orientation and sexual variation development by examining the biological, psychological and social contributing factors that influence the development of sexual orientations and variations along with treatment and modification of problematic sexual behaviors. Cross-listed with Psychological & Brain Sciences and Studies of Women, Gender, and Sexuality	3.00	25	T 3:00-5:30PM
AS.290.490	01	S		**Sr Sem: Behavioral Bio** *Holland, Peter C* Great ideas in Behavioral Biology. Discussion of classic and cutting edge articles in the original literature. Student presentations and reaction papers. Capstone course for senior Behavioral Biology majors. Behavioral Biology students only.	1.00	16	W 9:00-9:50AM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.020.104	01	N		**Fresh Sem: From Genes to DNA and Back** *Moudrianakis, E N* Freshmen Only. Students must obtain permission from Dr. Moudrianakis to register. A course consisting of introductory lectures followed by student presentations in the form of seminars. The issues analyzed will be: How did we arrive at the concept of the "gene"? Early experiments that gave substance to this concept. How did we arrive at the "one gene, one enzyme" dogma? What is the chemical nature of the gene? Is DNA enough for regulated gene expression? Is it "all in our genes"? What is genetic plasticity and epigenetics? What about genomics and proteomics?	1.50	24	T 1:30-2:45PM
AS.020.113	01	N		**Freshmen Seminar: Microbes in the Media** *Cebula, Thomas* Freshmen Only. Instructor's permission required for upperclassmen. This seminar discusses scientific issues that are in the news today. Possible topics might include: genomics; adaptation and evolution of bacterial pathogens; emergence of antibiotic resistance; pandemic flu; microbial communities and impact on public health; food safety; bioterrorism; synthetic biology; bioremediation; microbial fuel cells; or other biotechnology topics that could emerge during the semester.	2.00	20	W 2:00-4:00PM
AS.020.118	31	NQ		**JHU/Oxford: Intro to Stats for the Biological Sciences** *Schildbach, Joel F*	1.00	6	TBA
AS.020.123	01	N		**Genetics, Genomics and Evolution** *Schildbach, Joel F* Freshmen only. Prereq: Score of 4 or 5 on AP Biology Exam. An introductory of key principles of genetics, genomics and evolution. Lectures will alternate lab exercises and discussion of primary literature.	4.00	24	MW 11:00AM-12:45PM
AS.020.136	01	N		**Phage Hunting II** *Schildbach, Joel F* Freshmen only. Enrollment by permission of the instructor only. This is an introductory course open to all freshman regardless of intended major. No science background is required. This is the second semester of a year-long research-based project lab course in which students will participate in a nation-wide program in collaboration with undergraduates at other colleges. In the spring semester, students will annotate the genome of a bacteriophage isolated and characterized by a student in 020.135, in preparation for submission to a database and eventual publication. The course includes two lab meetings per week. Provides 2 credit hours of Natural Sciences (N) distribution credits and/or counts 2 hours toward the research requirement for the Molecular and Cellular Biology degree. No textbook is required.	2.00	24	MF 2:30-5:30PM
AS.020.136	02	N		**Phage Hunting II**	2.00	24	TTh 9:00-11:30AM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.020.152	01	N		**General Biology II** *Pearlman, Rebecca Shari* Section 01: Not open to Freshmen. Section 02: Open to Freshmen only. This course builds on the concepts presented and discussed in General Biology I. The primary foci of this course will be on the diversity of life and on the anatomy, physiology, and evolution of plants and animals. There will be a special emphasis on human biology. The workshops that were introduced in 020.151 General Biology I will include the use of simulation software, a critique of the primary literature, and an exploration of current trends in medicine. Prereq: AS.020.151 Cross-listed with Behavioral Biology	4.00	200	MWF 12:00-12:50PM; T 12:00-12:50PM
AS.020.152	02	N		**General Biology II** *Roberson, Christov*	4.00	200	TTh 12:00-1:20PM
AS.020.154	01	N		**General Biology Lab II** *Pearlman, Rebecca Shari* Students who have credit for AP Biology but take General Biology Lab II will lose all four credits of their overall credit for AP Biology. This course reinforces the topics covered in 020.152. Laboratory exercises explore subjects ranging from evolution to anatomy and physiology. Students participate in a project using molecular biology techniques to determine whether specific foods are made from genetically engineered plants. Cross-listed with Behavioral Biology	1.00	74	M 1:30-4:20PM
AS.020.154	02	N		**General Biology Lab II**	1.00	74	T 1:30-4:20PM
AS.020.154	03	N		**General Biology Lab II**	1.00	74	W 1:30-4:20PM
AS.020.154	04	N		**General Biology Lab II**	1.00	74	Th 1:30-4:20PM
AS.020.154	05	N		**General Biology Lab II**	1.00	44	F 1:30-4:20PM
AS.020.162	01	N		**Biology Workshop II** *Pearlman, Rebecca Shari* The Biology Workshop covers applications and current trends in biology, through guest lectures from researchers and hands□on computer programs. Credit will be awarded for EITHER 020.152 or 020.162, but not both. Prereq: Score of 4 or 5 on AP Biology exam	1.00	35	T 12:00-12:50PM
AS.020.302	31	N		**JHU/Oxford: Physiological Systems** *Schildbach, Joel F*	3.00	6	TBA
AS.020.305	31	N		**JHUBiochemistry** *Schildbach, Joel F* Prereq: 030.101-102(Intro Chemistry) - Sophomores, Juniors, and Seniors Only. - The molecules responsible for the life processes of animals, plants, and microbes will be examined. The structures, biosynthesis, degradation, and interconversion of the major cellular constituents including carbohydrates, lipids, proteins, and nucleic acids will illustrate the similarity of the biomolecules and metabolic processes involved in diverse forms of life.	4.00	10	TBA
AS.020.306	01	N		**Cell Biology** *Schroer, Trina A*	4.00	320	MWF 12:00-1:15PM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: AS.020.151 (or equivalent knowledge of biomolecules) or 020.305. How the molecules of living systems are organized into organelles, cells, tissues, and organisms will be explored, as well as how the activities of all of these are orchestrated and regulated to produce “life”—a phenomenon greater than the sum of its parts. Considerable emphasis is placed on experimental approaches to answering these questions. Topics covered include biological membranes, cytoskeletal elements, cell locomotion, membrane and protein traffic, the nucleus, second messengers, signal transduction, cell growth, the cell cycle, the extracellular matrix, cell contacts and adhesion, intercellular communication, epithelial structure and function, and the cell biology of early development and organ function.			
AS.020.312	01	N		**Intro to the Human Brain** *Hedgecock, Edward M* This course explores the outstanding problem of biology: how knowledge is represented in the brain. Relating insights from cognitive psychology and systems neuroscience with formal theories of learning and memory, topics include (1) anatomical and functional relations of cerebral cortex, basal ganglia, limbic system, thalamus, cerebellum, and spinal cord; (2) cortical anatomy and physiology including laminar/columnar organization, intrinsic cortical circuit, hierarchies of cortical areas; (3) activity-dependent synaptic mechanisms; (4) functional brain imaging; (5) logicist and connectist theories of cognition; and (6) relation of mental representations and natural language.	3.00	220	TTh 10:30-11:45AM
AS.020.315	31	N		**Biochemistry Lab** *Schildbach, Joel F* Pre/Co-requisite: 020.305 OR 250.307. Sections 6-10 are for BIOLOGY AND MOLECULAR & CELLULAR BIOLOGY MAJORS ONLY. This course will reinforce the topics presented in Biochemistry 020.305 or 250.307 through laboratory exercises which use quantitative measurement to study cellular components and processes. Topics include pH, proteins, carbohydrates, lipids, nucleic acids, and enzymes.	2.00	6	TBA; TBA
AS.020.316	01	N		**Cell Biology Lab** *Horner, Robert D* This course will reinforce the topics presented in 020.306 Cell Biology through laboratory exercises which use visible and fluorescence microscopy to study chromosomes, cell organelles, cell surface receptors, contractile proteins, and microfilaments. Prereq: 020.305; Coreq: 020.306	2.00	30	T 1:30-4:20PM; W 1:30-2:20PM
AS.020.316	02	N		**Cell Biology Lab**	2.00	30	W 1:30-2:20PM; W 2:30-5:20PM
AS.020.316	03	N		**Cell Biology Lab**	2.00	30	Th 1:30-4:20PM; W 1:30-2:20PM
AS.020.316	04	N		**Cell Biology Lab**	2.00	30	W 1:30-2:20PM; F 1:30-4:20PM
AS.020.316	05	N		**Cell Biology Lab**	2.00	30	M 1:30-4:20PM; W 1:30-2:20PM
AS.020.316	06	N		**Cell Biology Lab**	2.00	30	T 1:30-4:20PM; W 1:30-2:20PM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.020.316	07	N		**Cell Biology Lab**	2.00	30	W 2:30-5:20PM; W 1:30-2:20PM
AS.020.316	08	N		**Cell Biology Lab**	2.00	30	Th 1:30-4:20PM; W 1:30-2:20PM
AS.020.316	09	N		**Cell Biology Lab**	2.00	30	F 1:30-4:20PM; W 1:30-2:20PM
AS.020.316	10	N		**Cell Biology Lab**	2.00	30	M 1:30-4:20PM; W 1:30-2:20PM
AS.020.332	01	N		**Photosynthesis by Land and Aquatic Organisms** *Moudrianakis, E N* This course analyzes the fundamental process of photosynthesis, the process on which all life on Earth depends for its existence. We begin from the level of the structural organization of the photosynthetic machinery, and progress to the essentials of the photophysics of light capture by the primary pigments. Next we follow the conversion of photon flow to electron flow through the electron transport chain and finally we study the formation of chemical gradients that serve as temporary "energy stores" utilized in the synthesis of the essential chemicals that are consumed to drive carbon dioxide and nitrogen fixation and yield biomass. Finally, we compare the specializations of land and aquatic photosynthetic systems that serve the two different ecosystems. Prerequisites: 020.305 or special permission by the Instructor.	2.00	25	Th 9:00-10:30AM
AS.020.337	01	N		**Stem Cells & the Biology of Aging & Disease** *Zirkin, Barry R* This will be a team-taught lecture course that focuses on the properties of stem cells, their possible role in cancer (breast and prostate), stem cell aging, and the potential utilization of stem cells for therapy. Topics will include: mechanisms of stem cell renewal, stem cell potency, the impact of the stem cell niche, stem cells and the hematopoietic system, stem cells and the neural system, stem cells in the male and female gonads, induced pluripotent stem cells and cellular reprogramming, stem cell changes with aging, and ethical and policy issues in stem cell research and use. Most lectures will be research-oriented. Students will be expected to read and critically analyze current literature, with an emphasis on the experimental bases from which our current understandings derive.	2.00	90	W 3:00-4:45PM
AS.020.338	31	NQ		**JHU Oxford: Math & Statistics for the Biological Sciences** *Schildbach, Joel F*	3.00	6	TBA
AS.020.339	31	N		**JHU Oxford: Bioenergetics** *Schildbach, Joel F*	3.00	6	TBA
AS.020.346	01	N		**Immunobiology** *Edidin, Michael A* A course for upper-level undergraduates that will introduce them to immunochemistry, immunobiology, and clinical immunology. Emphasis is placed on the language, concepts, and experimental methodology of modern immunology and the application of this information to specific human diseases. Prereq: AS.020.330, AS.020.305, AS.020.306	3.00	100	MWF 11:00-11:50AM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.020.355	31	N		**JHU Oxford: Structure & Function of Macromolecules I** *Schildbach, Joel F* Open to JHU Oxford participants only	3.00	6	TBA
AS.020.356	31	N		**JHU Oxford: Structure & Function of Macromolecules II** *Schildbach, Joel F* Open to JHU Oxford participants only	3.00	6	TBA
AS.020.357	31	N		**JHU Oxford: Structure & Function of Macromolecules III** *Schildbach, Joel F* Open to JHU Oxford participants only.	3.00	6	TBA
AS.020.358	31	N		**JHU Oxford: Prokaryotic & Mammalian Metabolism** *Schildbach, Joel F* Open to JHU Oxford Participants only.	3.00	6	TBA
AS.020.359	31	N		**JHU Oxford: Chemical Pharmacology** *Schildbach, Joel F* Open to JHU Oxford participants only.	3.00	6	TBA
AS.020.363	01	N		**Developmental Biology** *Van Doren, Mark* Prereq: 020.330, 020.305, 020.306. Development of invertebrates, vertebrates and plants. The course will emphasize the experimental bases for the fundamental concepts of development.	3.00	300	MWF 10:00-10:50AM
AS.020.370	01	N		**Emerging Strategies and Applications in Biomedical Research** *Hattar, Samer* Prereq: 020.305 or 020.306 or 080.305 or 080.306; Juniors and Seniors only. Up-to-date primary literature manuscripts related to new discoveries and new strategies that are allowing scientists to make amazing progress in biomedical research will be presented. Examples include: labeling neurons with up to 90 different colors to trace their circuitry, evolution studies in glowing bacteria, detecting several viruses on a single chip and using fiber optics and channel rhodopsin to induce sleep. Students should be interested in reading primary literature research papers and discussing them in class.	3.00	40	TTh 9:00-10:15AM
AS.020.373	01			**Developmental Biology Lab** *Norris, Carolyn R* This laboratory explores the development of live animals and students in each section will sometimes be required to return to lab on succeeding days to observe and record the results of their experiments. Coreq: 020.363	2.00	22	T 1:30-5:20PM
AS.020.373	02			**Developmental Biology Lab**	2.00	22	W 1:30-5:20PM
AS.020.373	03			**Developmental Biology Lab**	2.00	22	Th 1:30-5:20PM
AS.020.373	04			**Developmental Biology Lab**	2.00	20	W 5:30-9:20PM
AS.020.387	31	N		**JHU Oxford: Molecular Biology I & II** *Schildbach, Joel F* Open to JHU Oxford participants only.	3.00	6	TBA
AS.020.402	01	N		**Sem:Molec & Cellular Bio** *Tifft, Kathryn*	3.00	15	W 6:00-9:00PM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This is a weekly seminar designed for students enrolled in the BA/MS program. The seminar involves student presentations of research and discussion of topics of current interest in the field. BA/MS students only.			
AS.020.404	31			**JHU Oxford: Upper-level Biology Tutorial** *Schildbach, Joel F* Open to JHU Oxford participants only.	3.00	6	TBA
AS.020.420	01	N		**Build-a-Genome** *Boeke, Jef D* Prereq: Permission of instructor; Must understand fundamentals of DNA structure, DNA electrophoresis and analysis, Polymerase Chain Reaction (PCR) and must be either a) Experienced with molecular biology lab work or b) Adept at programming with a biological twist. In this combination lecture/laboratory "Synthetic Biology" course students will learn how to make DNA building blocks used in an international project to build the world's first synthetic eukaryotic genome, Saccharomyces cerevisiae v. 2.0. Please study the wiki www.syntheticyeast.org for more details about the project. Following a biotechnology boot-camp, students will have 24/7 access to computational and wet-lab resources and will be expected to spend 15-20 hours per week on this course. Advanced students will be expected to contribute to the computational and biotech infrastructure. Co-listed with 580.420 and 540.420	4.00	10	MWF 5:00-6:20PM
AS.020.431	31	N		**JHU Oxford: Advanced Biochemistry & Molecular Biology** *Schildbach, Joel F* Open to JHU Oxford participants only.	4.00	6	TBA
AS.020.433	31	N		**JHU Oxford: Advanced Genetics** *Schildbach, Joel F* Open to JHU Oxford participants only.	3.00	6	TBA
AS.020.442	01	N		**Mentoring In Biology** *Pearlman, Rebecca Shari* Prereq: Successful completion 020.151/152 To become a mentor, students must have successfully completed 020.151/152, must apply using the form on the Biology Dept. Website, and must be accepted by the instructors. The deadline to apply is April 8th. This course provides students who have taken General Biology I & II the opportunity to mentor new students in General Biology I & II. Mentors collaborate with faculty on how to lead effective sessions, help student teams complete team assignments, and generally help students understand difficult concepts and principles in biology. Mentors must have a firm command of the topics covered in biology and must meet with both faculty and students through the course of the semester.	1.00	24	F 1:10-1:20PM
AS.020.442	02	N		**Mentoring In Biology**	1.00	15	F 1:30-1:40PM
AS.020.451	01	N		**Build-a-Genome Mentor** *Boeke, Jef D*	4.00	5	MWF 5:00-6:20PM

Biology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: Build-a-Genome (020.420) and instructor's consent. In addition to producing and sequencing DNA segments like regular B-a-G students, mentors will help prepare and distribute reagents, and maintain a Moodle site to track student reagent use and productivity. Mentors will also be expected to mentor specific students who are learning new techniques for the first time, contribute to the computational and biotech infrastructure associated with Build-a-Genome, and pursue at least one independent research project. Co-listed with 580.492			

Biophysics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.250.106	01	N		**Intro Biomed Rsch/Careers I** *Huang, P C* Lecture Series designed for those curious about a career in life sciences, medicine and public health. A novel format combining presentation with didactic interviews gives a broad view of a range of research topics, experimental approaches and logistics, and practical applications as well as career paths. Emphasis is on the excitement of scientific explorations not an abundance of the technical facts and figures. Freshmen and non-science majors Co-listed with 250.300 and 250.306	1.00	40	T 7:30-8:50PM
AS.250.205	01	N		**Introduction to Computing** *Fitch, Carolyn A* Instructor permission required. Course introduces students to the use of computers for applications in many areas (natural and social sciences, humanities, and engineering). Students will obtain basic computing skills and tools, including familiarity with UNIX, with the use of complex UNIX commands (e.g grep, awk, sed) and shell scripts, with the Python programming language, with graphing software and with a package for numerical and statistical computing, such as Mathematica or Matlab. Brief weekly lectures followed by extensive hands-on computer laboratories with examples from many disciplines. No prerequisites.	3.00	14	MWF 11:00-11:50AM
AS.250.253	01	N		**Protein Engineering and Biochemistry Lab** *Fitch, Carolyn A* Entry-level project laboratory. Protein engineering and biotechnology techniques are used to modify proteins to give them new structural or physical properties. Students will be introduced to standard biochemistry laboratory practice and protein science; perform experiments in site-directed mutagenesis, protein purification and structural and physical characterization of biological macromolecules.	3.00	5	Th 1:30-6:00PM
AS.250.265	01	N		**Introduction to Bioinformatics** *Fleming, Patrick* Instructor permission required. Lectures and computer labs introduce bioinformatics concepts, algorithms and databases. Computer based exercises cover sequence comparisons, database searching, gene expression analysis, and phylogenetic relationships. Emphasis on algorithms and a critical interpretation of information obtained.	3.00	15	TTh 10:30-11:45AM
AS.250.300	01	N		**Intro Biomed Rsch/Careers II** *Huang, P C*	1.00	20	T 7:30-8:50PM

Biophysics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Lecture Series designed for those curious about a career in life sciences, medicine and public health. A novel format combining presentation with didactic interviews gives a broad view of a range of research topics, experimental approaches and logistics, and practical applications as well as career paths. Emphasis is on the excitement of scientific explorations not an abundance of the technical facts and figures. Sophomores, juniors and seniors. Science Majors; Co-listed with 250.106 and 250.306			
AS.250.306	01	N		**Intro Biomed Rsch/Careers III** *Huang, P C* Lecture Series designed for those curious about a career in life sciences, medicine and public health. A novel format combining presentation with didactic interviews gives a broad view of a range of research topics, experimental approaches and logistics, and practical applications as well as career paths. Emphasis is on the excitement of scientific explorations not an abundance of the technical facts and figures. For those who have already taken 250.106 or 250.300. Co-listed with 250.106 & 250.300	1.00	10	T 7:30-8:50PM
AS.250.307	01	N		**Biochemistry** *Fleming, Patrick* Instructor permission required. Foundation for advanced classes in Biophysics and other quantitative biological disciplines. Topics include chemical, physical, and energetic principles of biochemistry. Lecture and computer laboratory.	4.00	30	MTW 12:00-12:50PM; Th 12:00-12:50PM
AS.250.372	01	N		**Intro Biophysical Chem** *Barrick, Doug* Prereq: Calculus, Organic Chemistry, and Introductory Physics Course provides working understanding of physical chemistry of the cell, emphasizing problem solving. Topics include classical and statistical thermodynamics, thermodynamics of proteins and nucleic acids, protein folding, calorimetry, ligand binding thermodynamics, linkage, cooperativity and anticooperativity, allosteric models, lattice statistics, helix-coil transition, and polymer theory. When appropriate, students visit the laboratory to set up data collection and learn to analyze the resulting data computationally, using nonlinear least-squares methods.	3.00	40	MWF 9:00-9:50AM

Biophysics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.250.411	01	N	W	**Advanced Seminar in Structural Biology of Chromatin** *Bowman, Gregory D* Focus is on structural and physical aspects of DNA processes in cells, such as nucleosomal packaging, DNA helicases, RNA polymerase, and RNA inhibition machinery. Topics are meant to illustrate how the structural and chemical aspects of how proteins and nucleic acids are studied to understand current biological questions. Biochemistry (250.307) or Biochemistry (020.305) and Intro to Biophys Chem (250.372) helpful.	3.00	15	T 3:00-5:30PM

Center for Africana Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.100.312	01	HS	W	**Emancipations** *Ewing, Adam* Comparative exploration of black emancipation and freedom struggles, including slave rebellions in the Caribbean and United States, global civil rights and black power, African nationalism, and the end of apartheid.	3.00	15	W 2:30-5:00PM
AS.100.440	01	HS	W	**The Revolutionary Experience in Latin America** *Knight, Franklin* Comparative examinations of revolutionary political changes in Haiti, Mexico, Bolivia, and Cuba. Cross-listed with Latin American Studies	3.00	20	TTh 10:30AM-12:00PM
AS.190.395	01	S		**Crime and Society** *Ginsberg, Benjamin* Contrary to the image most Americans have of their country, the United States is a tough nation with respect to crime. The U.S. has constructed a considerably more harsh criminal justice regime than any of its advanced industrial counterparts. In recent years, America's prisons and jails have held more than one percent of the nation's adults--2.3 million people–with many more on parole, probation or temporarily free on bail awaiting trial. In Western Europe, by contrast, fewer than two-tenths of one percent of the adult populace is behind bars. This enormous discrepancy in incarceration rates is more a function of the relative severity of America's criminal laws than differences between Europe and the U.S. in the actual incidence of serious crime. And, of course, while Western European nations no longer execute convicted criminals, the U.S. remains committed to the use of capital punishment. We will explore these and related issues of crime and punishment in the U.S.	3.00	25	W 1:30-3:50PM
AS.211.394	01	H	W	**Brazilian Cult & Civ** *Bensabat Ott, Mary M* This course is intended as an introduction to the culture and civilization of Brazil. It is designed to provide students with basic information about Brazilian history, art, literature, popular culture, theater, cinema, and music. The course will focus on how indigenous Asian, African, and European cultural influences have interacted to create the new and unique civilization that is Brazil today. The course is taught in English, but ONE extra credit will be given to students who wish to do the course work in Portuguese. Those wishing to do the course work in English for 3 credits should register for section 01. Those wishing to earn 4 credits by doing the course work in Portuguese should register for section 02. The sections will be taught simultaneously. Section 01: 3 credits Section 02: 4 credits (instructor's permission required)	3.00	35	M 2:00-4:20PM
AS.211.394	02	H	W	**Brazilian Cult & Civ**	4.00	20	M 2:00-4:20PM
AS.230.316	01	S		**African American Family** *McDonald, Katrina Bell*	3.00	30	TTh 1:30-2:45PM

Center for Africana Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is an examination of sociological theories and studies of African-American families and an overview of the major issues confronting African-American family life. The contemporary conditions of black families are explored, as well as the historical events that have influenced the family patterns we currently observe. Special attention will be given to social policies that have evolved as a result of the prominence of any one perspective at a given point in time.			
AS.230.356	01	S		**Contemporary African Social Movements** *Scully, Benjamin Thomas* This course is a survey of contemporary social movements in sub-Saharan Africa. The course will begin with an introduction to social movement theory. Subsequent weeks will each focus on a different type of movement (e.g. independence movements, labor movements, women's movements, environmental movements, etc.) The limited coverage of African issues in the US media tends to focus on either catastrophes or on development projects that are driven by international NGOs and the governments of northern countries. Through this course, students will gain a clear understanding of the broad range of actions that African civil society is using to address social problems throughout the continent. Materials used will include academic analysis of movements, writings by movement participants themselves, and films. The course will also introduce students to the most widely used social movement theories. Because these theories have been largely developed by social scientists in northern countries, the students will be asked to assess their applicability to African movements. Through this critical application of social theory, students will investigate the specific possibilities and constraints facing social and political actors in contemporary Africa. Cross listed with Dean's Teaching Fellowship, International Studies (CP) and Africana Studies.	3.00	20	TTh 3:00-4:15PM
AS.362.175	01	HS	W	**Black Power Movement** *Hayes, Floyd, III.* This course critically examines trends, developments, contradictions, and dilemmas related to the Black Power Movement for black identity and self-determination in the late 1960s and 1970s.	3.00	15	TTh 1:30-2:45PM
AS.362.204	01	H	W	**Women in African History** *Romero, Patricia* Selected readings written by or about notable African women from the 17th century to the present. Themes explored include slavery, power and religion, economics, health and politics.	3.00	15	Th 2:00-4:30PM
AS.362.206	01	HS	W	**Research Seminar: Baltimore History from the AFRO Newspaper Archives** *Hinderer, Moira*	3.00	10	W 1:30-3:50PM

Center for Africana Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This small, project-oriented class will introduce you to methods in historical research while exploring major topics in twentieth century Baltimore history. We will use the rich reporting of Baltimore's Afro-American Newspapers, to explore Baltimore's place in the larger history of Black urban experience. Students will analyze images and exhibits related to African-American history, as well as research and curate small online exhibits of primary source materials including photographs, newspaper clippings, correspondence, pamphlets, flyers, and maps. We will be among the first scholars to work in the Afro's rich archival collections, which include over a million images.			

Center for Language Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.373.112	01			**First Year Heritage Chinese II** *Lievens, Liman* Prereq: 373.111 or Perm Req'd. Lab Req'd. Continuation of 373.111. For students who have significant, previously acquired ability to understand and speak Modern Standard Chinese. Course focuses on reading and writing. Teaching materials are the same as used in 373.115-116; however, both traditional and simplified versions of written Chinese characters are used. Cross-listed with East Asian Studies	3.00	15	MWF 11:00-11:50AM
AS.373.112	02			**First Year Heritage Chinese II**	3.00	15	MWF 12:00-12:50PM
AS.373.116	01			**First Year Chinese II** *Li, Lu* Prereq: 373.115 or Perm. Req'd Continuation of 373.115. Introductory course in Modern Standard Chinese. Goals: mastery of elements of pronunciation and control of basic vocabulary of 800-900 words and most basic grammatical patterns. Students work first with Pin-Yin system, then with simplified version of written Chinese characters. Note: Student with existing demonstrable skills in spoken Chinese should take 373.111-112. Cross-listed with East Asian Studies	4.50	18	MWF 9:00-9:50AM; TTh 9:00-9:50AM
AS.373.116	02			**First Year Chinese II**	4.50	18	MWF 11:00-11:50AM; TTh 9:00-9:50AM
AS.373.116	03			**First Year Chinese II**	4.50	18	MWF 12:00-12:50PM; TTh 3:00-3:50PM
AS.373.116	04			**First Year Chinese II**	4.50	18	MWF 3:00-3:50PM; TTh 3:00-3:50PM
AS.373.212	01	H		**Second Year Heritage Chinese II** *Chen, Aiguo* Prereq: 373.211 or Perm Req'd. Continuation of 375.211. For students who have significant, previously acquired ability to understand and speak Modern Standard Chinese. Course focuses on reading and writing. Teaching materials are the same as used in 373.115-116; however, both traditional and simplified versions of written Chinese characters are used. Cross-listed with East Asian Studies	3.00	15	MWF 11:00-11:50AM
AS.373.212	02	H		**Second Year Heritage Chinese II**	3.00	15	MWF 12:00-12:50PM
AS.373.216	01	H		**Second Year Chinese II** *Chen, Aiguo* Perm Req'd. Consolidation of the foundation that students have laid in their first year of study and continued drill and practice in the spoken language, with continued expansion of reading and writing vocabulary and sentence patterns. Students will work with both simplified and traditional characters. Note: Students who have native-like abilities in comprehension and speaking should take 373.211-212. Cross-listed with East Asian Studies	4.50	23	MWF 9:00-9:50AM; TTh 12:00-12:50PM
AS.373.216	03	H		**Second Year Chinese II**	4.50	23	MWF 12:00-12:50PM; TTh 3:00-3:50PM
AS.373.314	01	H		**Third Year Heritage Chinese II** *Chen, Aiguo*	3.00	15	MWF 10:00-10:50AM

Center for Language Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 373.313 or equivalent This course is a continuation of 373.313. Students need to have native-level fluency in speaking and understanding Chinese. The course focuses on reading and writing. In addition to the textbooks, downloaded articles on current affairs may also be included on a regular basis. Lab required.			
AS.373.316	01	H		**Third Year Chinese II** *Lievens, Liman* Prereq: 373.315 or Perm Req'd. Continuation of 373.315. This two-semester course consolidates and further expands students' knowledge of grammar and vocabulary and further develops reading ability through work with textbook material and selected modern essays and short stories. Class discussions will be in Chinese insofar as feasible, and written assignments will be given. Cross-listed with East Asian Studies	3.00	15	MWF 10:00-10:50AM
AS.373.416	01	H		**Fourth Year Chinese II** *Lievens, Liman* Continuation of 373.415. Readings in modern Chinese prose, including outstanding examples of literature, newspaper articles, etc. Students should understand most of the readings with the aid of a dictionary, so that class discussion need not focus primarily on detailed explanations of grammar. Discussion, to be conducted in Chinese, will concentrate on the cultural significance of the readings' content. Cross-listed with East Asian Studies	3.00	15	MWF 3:00-3:50PM
AS.373.451	01	H		**Topics in Chinese Media** *Zhao, Nan* Prereq: Completion of four years of Chinese language or its equivalent. The main focus of this course is to expand the student's knowledge of four essential skills in Chinese language and to deepen the student's knowledge of Chinese culture. The course is taught based on various written and visual materials (including newspapers, journals, TV, movies, and short novels) to improve students' reading comprehension, maintain conversation skills through class discussion, increase understanding of the culture and society of China, and enhance writing ability through short compositions and a writing project. Cross-listed with Asian Studies.	3.00	18	TTh 10:30-11:45AM
AS.375.116	01			**First Year Arabic II** *Tahrawi, Khalil* May not be taken Satisfactory/ Unsatisfactory Continuation of 375.115. Introductory course in speaking, listening, reading, and writing Modern Standard Arabic. Presents basic grammatical structures and a basic vocabulary. Through oral-aural drill in classroom, tapes in Language Laboratory, and reading/writing exercises, students attain a basic level of competence on which they can build in subsequent years of study. Accelerated students should register for Section 1	4.50	18	MTWThF 9:00-9:50AM
AS.375.116	02			**First Year Arabic II**	4.50	18	MTWThF 10:00-10:50AM

Center for Language Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.375.116	03			**First Year Arabic II**	4.50	18	MWF 8:00-8:50AM; TTh 9:00-9:50AM
AS.375.216	01	H		**Second Year Arabic II** *Abdallah, Fadel* Continuation of 375.215. Designed to bring students up to competency level required for third/fourth year Arabic. Students will consolidate and expand their mastery of the four basic skills acquired in 375.115-116. More authentic material--written, audio, and visual--will be used, and culture will be further expanded on as a fifth skill. Accelerated students should register for Section 1	4.00	18	MTWTh 12:00-12:50PM
AS.375.216	02	H		**Second Year Arabic II**	4.00	18	MTWTh 3:00-3:50PM
AS.375.302	01	H		**Third Year Arabic II** *Abdallah, Fadel* Prereq: Two years of Arabic or Perm Req'd. Continuation of 375.301. Designed to enhance students' ability to read, discuss, and write about various topics covered in traditional and contemporary Arabic texts.	3.00	18	MW 1:30-2:50PM
AS.375.402	01	H		**Fourth Year Arabic II** *Tahrawi, Khalil* Prereq: 375.302 or equivalent Continuation of 375.401. This is an introductory course to different periods of the Arabic literature. Selections of famous Arabic poetry and short prose works are the substance of the course.	3.00	15	MWF 11:00-11:50AM
AS.377.132	01			**Elementary Russian II** *Samilenko, Olya* Prereq: 377.131 Section 02 taught at Goucher May not be taken S/U Continuation of 377.131. Designed to give student a firm foundation in the language, with special emphasis on the development of vocabulary, basic reading, and conversational skills.	4.00	25	MTWF 9:00-9:50AM
AS.377.132	02			**Elementary Russian II** *Czeczulin, Annalisa*	4.00	17	MTWF 12:30-1:20PM
AS.377.209	01	H		**Adv Russian Grammar** *Czeczulin, Annalisa* Continuation of 377.208. Intensive oral work; continued emphasis on grammar and reading comprehension.	4.00	17	MTWF 10:00-10:50AM
AS.377.210	01	H		**Russian Conversation & Composition** *Samilenko, Olya* Taught at Goucher Discussions based on readings assigned in advance. Special attention is paid to the acquisition and active use of pertinent vocabulary.	3.00	17	Th 10:30AM-1:00PM
AS.377.318	01	H		**Chekov and the Short Story** *Samilenko, Olya* Taught in Russian Chekhov's short stories and plays studied against the social, political, and philosophic background of his time. Close readings and in-depth stylistic analysis. Designed for advanced students.	3.00	17	MWF 11:00-11:50AM

Center for Language Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.377.335	01	H		**Technical Translation** *Czeczulin, Annalisa* Taught at Goucher. Advanced work in translating-- Russian into English-- in the sciences and social sciences.	3.00	17	TTh 1:30-2:45PM
AS.377.396	01	H		**Senior Seminar II: Russian Poetry** *Samilenko, Olya* An examination of major poets, styles, and poetic genres of 18-21C Russian poetry.	3.00	17	MWF 10:00-10:50AM
AS.378.116	01			**First Year Japanese II** *Nakao, Makiko Pennington* Prereq. 378.115. This course is designed for students who have no background or previous knowledge in Japanese. The course consists of lectures on Tuesday/Thursday and conversation classes on Monday/Wednesdays/Fridays. The goal of the course is the simultaneous progression of four skills (speaking, listening, writing, and reading) as well as familiarity with aspects of Japanese culture. By the end of the fall term, students will have basic speaking and listening comprehension skills, a solid grasp of basic grammar items, reading and writing skills, and a recognition and production of approximately 60 kanji in context. Knowledge of grammar will be expanded significantly in 2nd year Japanese. May not be taken S/U. Cross-listed with East Asian Studies	4.50	16	MWF 10:00-10:50AM; TTh 10:30-11:20AM
AS.378.116	02			**First Year Japanese II**	4.50	16	MWF 12:00-12:50PM; TTh 12:00-12:50PM
AS.378.116	03			**First Year Japanese II**	4.50	16	MWF 11:00-11:50AM; TTh 12:00-12:50PM
AS.378.216	01	H		**Second Year Japanese II** *Katagiri, Satoko* Prereq: 378.215 or equivalent Lab required Limit 15 per section Continuation of Beginning Japanese and Intermediate Japanese I; Training in spoken and written language, increasing their knowledge of more complex patterns. At completion, students will have a working knowledge of about 250 Kanji. Cross-listed with East Asian Studies	4.50	16	MWF 11:00-11:50AM; TTh 10:30-11:20AM
AS.378.216	02	H		**Second Year Japanese II**	4.50	16	MTWThF 12:00-12:50PM
AS.378.316	01	H		**Third Year Japanese II** *Katagiri, Satoko* Prereq: 378.315 or equivalent. Continuation of 378.315. Emphasis shifts toward reading, while development of oral-aural skills also continues apace. The course presents graded readings in expository prose and requires students to expand their knowledge of Kanji, grammar, and both spoken and written vocabulary. Lab required. Cross-listed with East Asian Studies	3.00	16	MWF 9:00-9:50AM
AS.378.416	01	H		**Fourth Year Japanese II** *Nakao, Makiko Pennington*	3.00	15	MW 1:30-2:50PM

Center for Language Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 378.415 Lab Req'd. By using four skills in participatory activities (reading, presentation, and discussion), students will develop reading skills in modern Japanese and deepen and enhance their knowledge on Kanji and Japanese culture. Cross-listed with East Asian Studies			
AS.380.102	01			**First Year Korean II** *Kang, Choonwon* Prereq: 380.101 or Perm. Req'd. Continuation of 380.101. Focuses on improving speaking fluency to Limited Proficiency so that one can handle simple daily conversations with confidence. It provides basic high-frequency structures and covers Korean holidays. Cross-listed with East Asian Studies	3.00	16	MWF 9:00-9:50AM
AS.380.202	01	H		**Second Year Korean II** *Kang, Choonwon* Prereq: 380.201 or equivalent. Continuation of 380.201. Aims for improving writing skills with correct spelling. Reading materials of Korean people, places, and societies will enhance cultural understanding and awareness, including discussion on family tree. Cross-listed with East Asian Studies	3.00	16	MWF 10:00-10:50AM
AS.380.302	01	H		**Third Year Korean II** *Kang, Choonwon* Prereq: 380.301 or equivalent. Continuation of 380.301. Emphasizes reading literacy in classic and modern Korean prose. By reading Korean newspapers and professional articles in one's major, it enables one to be well-versed and truly literate. Cross-listed with East Asian Studies	3.00	16	MW 12:00-1:15PM
AS.381.102	01			**Beginning Hindi II** *Saini, Uma* This course prepares students to function in everyday situations in the Hindi speaking world. Focuses on the acquisition of basic vocabulary and grammatical structures in culturally authentic contexts through listening, speaking, reading, and writing comprehension. Hindi reading and writing is taught in its original Dayva-nagari script. Oral-aural drills in class and work in the Language Lab is required.	3.00	15	TTh 10:30-11:45AM
AS.381.102	02			**Beginning Hindi II**	3.00	15	TTh 3:00-4:15PM
AS.381.202	01	H		**Intermediate Hindi II** *Saini, Uma* Prereq. 381.201 or Perm Req'd. Continuation of 381.201. Course provides refinement of basic language skills in cultural context. Emphasis will be on expansion of vocabulary and grammatical structures and further development of communicative skills.	3.00	15	MW 4:30-5:45PM
AS.384.116	01	H		**First Year Modern Hebrew II** *Cohen, Zvi* Pre-req 384.115. Designed to provide reading and writing mastery, to provide a foundation in Hebrew grammar and to provide basic conversational skills. Cross-listed with Jewish Studies.	4.00	15	MTWTh 9:00-9:50AM

Center for Language Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.384.216	01			**Second Year Modern Hebrew II** *Cohen, Zvi* Pre-req 384.215. Designed to enrich vocabulary and provide intensive grammatical review, and enhance fluency in reading, writing and comprehension. Cross-listed with Jewish Studies.	4.00	10	MW 10:00-10:50AM; TTh 10:30-11:20AM
AS.384.316	01	H		**Third Year Modern Hebrew II** *Cohen, Zvi* Pre-req 384.315. Designed to: maximize comprehension and the spoken language through literary and newspaper excerpts providing the student with the language of an educated Israeli. Cross-listed with Jewish Studies.	4.00	10	MTWTh 3:00-3:50PM

Chemistry

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.030.102	01	N		**Introductory Chemistry II** *Staff* Continuation of 030.101 emphasizing chemical kinetics, chemical bonding. Topics: energy levels and wavefunctions for particle-in-a-box and hydrogen atom and approximate wavefunctions for molecules including introduction to hybrid orbitals. Note: Appropriate adjusting caps should be used – to ensure both sections are approximately the same size	3.00	290	MWF 9:00-9:50AM
AS.030.102	02	N		**Introductory Chemistry II**	3.00	290	MWF 10:00-10:50AM
AS.030.103	01	N		**Applied Chemical Equilibrium and Reactivity w/lab** *Greco, Jane* Prereqs: 030.101, 030.102, 030.105, and 030.106 This course is designed for freshmen who have received AP or other placement credit for 030.101□102. Chemical equilibrium, reactivity and bonding will be covered. These topics will be explored through the use of laboratory experiments and problem solving, and the use of these principles in current research areas will be discussed.	4.00	30	MWF 9:00-9:50AM; T 1:30-5:00PM
AS.030.103	02	N		**Applied Chemical Equilibrium and Reactivity w/lab**	4.00	30	MWF 9:00-9:50AM; T 1:30-5:00PM
AS.030.106	01	N		**Intro Chemistry Lab** *Pasternack, Louise* Fundamental methods of chemistry with related calculation. Prereq: 030.105 or either 030.102 (Co- or Prereq.) or 510.101 (Prereq.) - Students may attend either the Thursday 1:30-2:20 lecture or Friday 1:30-2:20 lecture.	1.00	90	F 1:30-2:20PM; M 1:30-4:20PM
AS.030.106	02	N		**Intro Chemistry Lab**	1.00	90	Th 1:30-2:20PM; T 1:30-4:20PM
AS.030.106	03	N		**Intro Chemistry Lab**	1.00	90	F 1:30-2:20PM; W 1:30-4:20PM
AS.030.106	04	N		**Intro Chemistry Lab**	1.00	90	Th 1:30-2:20PM; Th 2:30-5:20PM
AS.030.106	05	N		**Intro Chemistry Lab**	1.00	90	F 1:30-2:20PM; F 2:30-5:20PM
AS.030.106	07	N		**Intro Chemistry Lab**	1.00	66	Th 1:30-2:20PM; T 9:00-11:50AM
AS.030.206	01	N		**Organic Chemistry II** *Staff* Prereq: 030.205 Continuation of 030.205 Organic Chemistry II with biochemistry topics. This course is a continuation of Organic Chemistry I starting with carbonyl chemistry and organometallic reactions. Synthetic strategies and retro-synthetic analysis are emphasized. The second half of the course focuses on biochemical topics including biological pericyclic reactions, carbohydrates, amino acids, proteins, nucleic acids, RNA, DNA, catalysis, and lipids. The organic chemistry of key metabolic steps will also be covered. Students may not simultaneously enroll for AS.030.212 and AS.030.206.	4.00	300	MWF 9:00-9:50AM; Th 9:00-10:20AM
AS.030.206	31	N		**Intro Organic Chem II** *Schildbach, Joel F*	4.00	6	TBA; TBA
AS.030.212	01	N		**Advanced Organic Chemistry** *Lectka, Thomas*	3.00	100	MWF 10:00-10:50AM

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Must recieve a B+ or better in the first semester (AS.030.205) Second semester undergraduate organic chemistry from an advanced and rigorous prospective. Enrollment limited to students who received a B+ or better in the first semester (AS.030.205.01). Highly recommended for majors who fulfill the grade criterion. Topics include 2D NMR, synthesis with a stress on modern methods, chiral molecules, and mechanistic analysis. Students will be required to access the primary literature and to use molecular modeling programs such as Spartan. Students may not simultaneously enroll for AS.030.212 and AS.030.206.			
AS.030.225	01	N		**Intro Organic Chem Lab** *D'Souza, Larissa N* Techniques include methods of purification, isolation, synthesis, and analysis. Prerequisites: AS.030.101 AND AS.030.102 AND AS.030.105 AND AS.030.106 AND AS.030.205, Permission required for Freshmen.	3.00	44	M 1:30-6:30PM; T 9:00-10:20AM
AS.030.225	02	N		**Intro Organic Chem Lab**	3.00	44	T 12:30-5:30PM; T 9:00-10:20AM
AS.030.225	03	N		**Intro Organic Chem Lab**	3.00	44	W 1:30-6:30PM; T 9:00-10:20AM
AS.030.225	04	N		**Intro Organic Chem Lab**	3.00	44	Th 12:30-5:30PM; T 9:00-10:20AM
AS.030.225	05	N		**Intro Organic Chem Lab**	3.00	44	F 1:30-6:30PM; T 9:00-10:20AM
AS.030.228	01			**Intmd Organic Chem Lab** *Rokita, Steven* Lab skills already acquired (030.225) will be further developed for synthesis, isolation, purification, and identification of organic compounds. Spectroscopic techniques, applications will be emphasized. Prereq: 030.225	3.00	32	WF 1:30-6:30PM
AS.030.302	01	N		**Physical Chemistry II** *Silverstone, Harris* Introduction to quantum mechanics, its application to simple problems for which classical mechanics fails. Topics: Harmonic oscillator, hydrogen atom, very approximate treatments of atoms and molecules and theoretical basis for spectroscopy. Prereq: 030.301	3.00	40	MWF 10:00-10:50AM
AS.030.306	01	N		**Phys Chem Instr Lab** *Tolman, Joel R* Designed to illustrate the principles of physical chemistry, introduce the student to spectroscopic techniques and instruments used in modern chemical research. Chemistry majors expected to take this sequence of courses rather than 030.307. Prereq: 030.301 or 030.302	3.00	16	M 1:30-2:20PM; M 2:30-6:30PM
AS.030.306	02	N		**Phys Chem Instr Lab**	3.00	16	T 1:30-2:20PM; T 2:30-6:30PM
AS.030.345	01	N		**Chem Appl:Group Theory** *Yarkony, David R* The theory of the representations of finite and continuous groups will be applied to problems in chemistry.	3.00	25	MW 12:00-1:15PM
AS.030.402	01			**Experimental Methods in Physical Chemistry** *Bowen, Kit H, Jr.*	3.00	30	TBA

Chemistry

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course introduces the student to experimental methodologies used in gas phase physical chemistry. Topics to be covered include vacuum technology, charged particle optics, lasers, mass spectrometry, data acquisition, detectors, measurement of temperature and pressure, and design and fabrication of scientific apparatus. These topics will be tied together with examples of specific experimental studies.			
AS.030.441	01	N		**Spectroscopic Methods of Organic Structure Determination** *Tovar, John Dayton* The course provides fundamental theoretical background for and emphasizes practical application of ultraviolet/visible and infrared spectroscopy, proton and carbon-13 nuclear magnetic resonance and mass spectrometry to the structure proof of organic compounds.	3.00	30	MWF 11:00-11:50AM
AS.030.446	01	N		**Mathematica as a Tool for Chemists** *Silverstone, Harris* Prereq: Calculus (including power series) A systematic, hands-on introduction to Mathematica. Covers Mathematica's basic "language," analytic and numerical calculations, data manipulation, graphical representation, interactivity, programming, and document production.	3.00	20	TTh 10:30-11:45AM
AS.030.451	01	N		**Spectroscopy** *Dagdigian, Paul J* Spectroscopy and structure of molecules starting from rotational, vibrational and electronic spectra of diatomic molecules and extending to polyatomic molecules as time permits.	3.00	15	TTh 9:00-10:20AM

Classics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.424	01	H		**Collecting Roman Art: From Antiquity to Present** *Tucci, Pier Luigi* A survey of the most important collections of Greek and Roman sculpture, from the late-Republican age through the Middle Ages and the Renaissance, until the creation of the main museums in Europe and in the United States.	3.00	25	TTh 4:30-5:45PM
AS.040.102	01	H		**Jews, Greeks and Others in Ancient Israel: Historical and Archeological Aspects of Cultural Interactions** *Fischer, Moshe Ladislav* This course will study cultural interactions in Ancient Israel from Classical times to Late Antiquity (5th century BCE – 8th century CE) from both the archaeological and historical points of view. Priority will be given to material evidence of the possible character of the pluralistic societies which were typical of Ancient Israel during these periods. Issues on which the course is focused will include Jews, Greeks, Phoenicians under Persian rule; Jews and Greeks in Hellenistic Palestine (the backdrop to the Maccabean wars) and the time of Herod the Great (the background for events of the first and second centuries CE). Examination of archaeology of the Holy Land in the first centuries of Christianity, in particular the impact of Christian pilgrimage on Palestinian society, and later the interaction with Islam. Cross-listed with Jewish Studies Program	3.00	25	TTh 9:00-10:15AM
AS.040.106	01			**Elementary Ancient Greek** *Staff* Course provides comprehensive, intensive introduction to the study of ancient Greek. The first semester's focus is morphology and vocabulary; the second semester's emphasis is syntax and reading. Credit is given only upon completion of a year's work. Course may not be taken Satisfactory/ Unsatisfactory.	4.00	20	MWF 9:00-9:50AM; TTh 9:00-9:50AM
AS.040.108	01			**Elementary Latin** *Staff* Course provides comprehensive, intensive introduction to the study of Latin for new students as well as systematic review for students with background in Latin. The first semester's emphasis is morphology and vocabulary; the second semester's focus is syntax and reading. Credit is given only upon completion of a year's work. Course may not be taken Satisfactory/ Unsatisfactory.	3.50	20	MWF 10:00-10:50AM
AS.040.108	02			**Elementary Latin**	3.50	20	MWF 11:00-11:50AM
AS.040.111	01	H		**Ancient Greek Civilization: Society, Archaeology, Literature, Philosophy** *Yatromanolakis, Dimitrios* The course will introduce students to major aspects of the ancient Greek civilization, with special emphasis placed upon culture, society, archaeology, literature, and philosophy.	3.00	30	TTh 3:00-4:15PM
AS.040.119	01	H		**The World of Pompeii** *Valladares, Herica*	3.00	25	MW 12:00-12:50PM; F 12:00-12:50PM

Classics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course will focus on the history and archaeology of Pompeii. Close attention will also be paid to the reception of Pompeian materials in European and American culture. Cross-listed with History of Art and the Program in Museums and Society.			
AS.040.119	02	H		**The World of Pompeii**	3.00	25	MW 12:00-12:50PM; F 1:30-2:20PM
AS.040.206	01	H		**Intermediate Ancient Greek** *Staff* Reading ability in classical Greek is developed through a study of various authors, primarily Plato (fall) and Homer (spring). Prerequisites: 040.105-106 or equivalent.	3.00	20	TTh 10:30-11:45AM
AS.040.208	01	H		**Intermediate Latin** *Staff* Reading ability in Latin is developed through the study of various authors, primarily Cicero (fall) and Vergil (spring). Prerequisites: 040.107-108 or equivalent.	3.00	20	MWF 10:00-10:50AM
AS.040.229	01	H		**Victory and Defeat in Ancient Rome** *Schwinge, Elisabeth* The Romans are known for their success at war which made it possible to build an empire. This course will explore two aspects of this success story: victory and defeat. Dean's Teaching Fellowship course.	3.00	25	TTh 1:30-2:45PM
AS.040.232	01	H		**Island Archaeology: The Social Worlds of Crete, Cyprus and the Cyclades** *Anderson, Emily S.K.* Islands present highly distinctive contexts for social life. We examine three island worlds of the third and second millennia BCE through their archaeological remains, each with its particularities. These are places where water had a unique and powerful meaning, where boat travel was part of daily life, where palaces flourished and where contact with other societies implied voyages of great distance across the sea. Class combines close study of material culture and consideration of island-specific interpretive paradigms; students work with artifacts in the JHU Archaeological Museum.	3.00	15	TTh 10:30-11:45AM
AS.040.306	01	H		**Advanced Ancient Greek** *Montiglio, Silvia* (Same course as AS.040.702) Reading of prose or verse authors, depending on the needs of students. This semester the course will focus on Euripides' tragedy, The Bacchae. Prerequisites: 040.205-206 or equivalent.	3.00	20	MW 3:00-4:15PM
AS.040.307	01	H		**Advanced Latin Prose** *Roller, Matthew* (Same course as AS.040.707) This course aims to increase proficiency and improve comprehension of the Latin language. Intensive reading of Latin texts, with attention to grammar, idiom, translation, etc. Specific offerings vary. This semester's focus is on Cicero's letters. Prerequisites: 040.207-208 or equivalent.	3.00	20	TTh 12:00-1:15PM
AS.150.401	01	H	W	**Greek Philosophy: Plato and His Predecessors** *Bett, Richard*	3.00	20	TTh 10:30-11:45AM

Classics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				A study of pre-Socratic philosophers, especially those to whom Plato reacted; also an examination of major dialogues of Plato with emphasis upon his principal theses and characteristic methods. Cross-listed with Classics			

Cognitive Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.050.102	01	NS		**Language and Mind** *Omaki, Akira* Introductory course dealing with theory, methods, and current research topics in the study of language as a component of the mind. What it is to “know” a language: components of linguistic knowledge (phonetics, phonology, morphology, syntax, semantics) and the course of language acquisition. How linguistic knowledge is put to use: language and the brain and inguistic processing in various domains. Cross-listed with Neuroscience and Psychology.	3.00	50	TTh 9:00-10:15AM
AS.050.109	01	NS		**Minds, Brains and Computers** *Chen-Main, Joan* Mental processes such as language comprehension and visual perception involve complex computations carried out by the brain. But how do brains compute? What exactly does it mean to "compute" anyway? How do the brain and mind relate? Topics include cognition viewed as abstract computation, the brain viewed as a physical computer, and "neural network" computers viewed as models of how both the mind and the brain compute.	3.00	30	TTh 12:00-1:15PM
AS.050.203	01	NS		**Cognitive Neuroscience: Exploring the Living Brain** *Rapp, Brenda C* This course surveys theory and research concerning how mental processes are carried out by the human brain. Currently a wide range of methods of probing the functioning brain are yielding insights into the nature of the relation between mental and neural events. Emphasis will be placed on developing an understanding of both the physiological bases of the techniques and the issues involved in relating measures of brain activity to cognitive functioning. Methods surveyed include electrophysiological recording techniques such as EEG, VEP, ERP, single/multiple unit recording and MEG; functional imaging techniques such as PET and fMRI; and methods that involve lesioning or disrupting neural activity such as WADA, cortical stimulation, animal lesion studies, and the study of brain-damaged individuals. (Co-listed as 080.203 in Neuroscience.)	3.00	250	TTh 10:30-11:45AM
AS.050.312	01	NS		**Cognitive Neuroimaging Methods in High-Level Vision** *Park, Soojin*	3.00	10	T 1:30-4:00PM

Cognitive Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is an advanced seminar and research practicum course. It will provide the opportunity to learn about fMRI methods used in the field of vision science and for students to have hands-on experience to develop, design and analyze a research study on topics in the cognitive neuroscience field of high-level vision. In the first part of the course students will read recent fMRI journal papers and learn about common fMRI designs and analysis methods; in the second part of the course students will conduct a research study as a group to address a research question developed from readings. Students are expected to write a paper in a journal article format at the end of the course and to present their results in front of the class. Research topics will vary but with special focus on topics in object, scene and space recognition. Cross-listed with Neuroscience and Psychology. Prereqs. AS.050.204, AS.050.319, AS.050.203,AS.080.203, AS.050.315 or 200.312, or equivalent; instructor's permission required.			
AS.050.318	01	NS		**Practicum in Language Disorders** *Rapp, Brenda C* This course provides the opportunity to learn about adult aphasias; language disorders which are one of the most common consequences of stroke. You will receive training in Supportive Communication Techniques and work as a communication partner with an individual with aphasia for two hours per week. Three class meetings for orientation and reading assignments will be held on campus; training and practicum will be conducted at a local aphasia support center. Transportation required. Please read the prerequisites carefully and register in-person. A minimum major GPA of 3.5 is also required. Co-listed with 080.400. Please see additional information on the Neuroscience Department Website.	2.00	3	TBA
AS.050.320	01	NS		**Syntax I** *Legendre, Geraldine* Introduces the basic methods and means of analysis used in contemporary syntax investigations, practicing with data from different languages. Also offered as AS.050.620. Must meet prerequisites or instructor's approval. Prereqs: AS.050.102 and AS.050.240.	3.00	25	MW 1:30-2:45PM
AS.050.339	01	NS		**Cognitive Development** *Staff*	3.00	25	MWF 10:00-10:50AM

Cognitive Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This is a survey course in developmental psychology, designed for individuals with some basic background in psychology or cognitive science, but little or none in development. The course is strongly theoretically oriented, with emphasis on issues of nature, nurture, and development. We will consider theoretical issues in developmental psychology as well as relevant empirical evidence. The principle focus will be early development, i.e., from conception through middle childhood. The course is organized topically, covering biological and prenatal development, perceptual and cognitive development, the nature and development of intelligence, and language learning. Also listed as AS.050.639.Cross-listed with Neuroscience. Instructor's approval required.			
AS.050.370	01	NS		**Formal Methods in Cognitive Science: Language** *Rawlins, Kyle* This course will be devoted to the study of formal systems that have proven useful in the cognitive science of language. We will discuss a wide range of mathematical structures and techniques and demonstrate their applications in theories of grammatical competence and performance. A major goal of this course is bringing students to a point where they can evaluate the strengths and weaknesses of existing formal theories of cognitive capacities, as well as profitably engage in such formalization, constructing precise and coherent definitions and rigorous proofs. Also offered as AS.050.670.	3.00	25	MW 12:00-1:15PM
AS.050.371	01	NS		**Formal Methods in Cognitive Science: Inference** *Wilson, Colin* This course introduces techniques for computational modeling of aspects of human cognition, including perception, categorization, and induction. Possible topics include maximum likelihood and Bayesian inference, structured statistical models (including hierarchical and graphical models), nonparametric models. The course emphasizes the close connections among data analysis, theory development, and modeling, with examples drawn from language and vision. No prerequisites.	3.00	25	MW 4:30-5:45PM
AS.050.446	01	NS		**Integrative Research Methods in Cognitive Science** *Smolensky, Paul* Through a series of case studies, we will examine contemporary approaches to integrating the perspectives and research methods of multiple sub-disciplines of cognitive science. Also offered as AS.050.646. Prereqs. AS.050.326 or instructor's permission required.	3.00	15	MW 3:00-4:25PM
AS.080.203	01	NS		**Cognitive Neuroscience** *Rapp, Brenda C* This course surveys theory and research concerning how the human brain carries out mental processes. Co-listed as 050.203 in Cognitive Science.	3.00	250	TTh 10:30-11:45AM
AS.080.320	01	N		**The Auditory System**	3.00	30	WF 1:30-2:45PM

Cognitive Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Boatman, Dana F Prereqs. AS.080.305 and AS.080.306 This course will cover the neuroanatomy and neurophysiology of the human auditory system from the ear to the brain. Behavioral, electrophysiological, and neuroimaging methods for assessing peripheral and central auditory function will be discussed. Acquired and developmental disorders of auditory function will be reviewed using clinical case studies.			

Dean's Teaching Fellowship Courses

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.040.229	01	H		**Victory and Defeat in Ancient Rome** *Schwinge, Elisabeth* The Romans are known for their success at war which made it possible to build an empire. This course will explore two aspects of this success story: victory and defeat. Dean's Teaching Fellowship course.	3.00	25	TTh 1:30-2:45PM
AS.070.304	01	HS	W	**Child Adoption and Family Making** *Reyes Kipp, Anaid Citlalli* Dean's Teaching Fellowship Course. The course takes child adoption as a starting point to critically explore how kinship and family are connected to legal practices, technological innovations, and broader historical, political, and socio-economic processes. Cross List: WGS, PLAS.	3.00	15	M 4:00-6:20PM
AS.212.343	01	H	W	**Literature and Science in France 1750-1880** *Roman, Hanna Andrea* Prereqs: 210.301 and 210.302 and 212.333 or 212.334. This course will investigate changes in the meaning and function of the literature of science and of the natural world during the period 1750-1850 (N.B. All course readings, assignments, and discussions will be conducted in French). Dean's Teaching Fellowship	3.00	15	TTh 12:00-1:15PM
AS.215.311	01	H		**Radicalism, Film & Literature in Modern Latin America** *Strayer, Michael Mclachlan* This course will explore the cultural symbiosis of radical politics, film, and literature in modem Latin America. Beginning with Cuban revolutionary Jose Marti and the definitive end of the Spanish Empire and concluding with current socialist movements in South America, we will analyze key radical texts by the likes of Friedrich Engels and Ernesto "Che" Guevara, classic films like The Battle of Chile by Patricio Guzman, and important works of literature by authors such as Pablo Neruda and Rigoberta Menchu. Note: Class will be conducted in English and all assigned texts will also be in English in order to encourage interdisciplinary enrollment and participation.	3.00	25	TTh 4:30-5:45PM
AS.230.344	01	S	W	**Health and Society in Contemporary China** *Core, Rachel S* This class examines the social and health consequences of systemic transformations in China, including collapse of the urban work-unit system, resurgence of infectious disease, and implementation of the One-Child Policy. Dean's Teaching Fellowship; Cross listed with East Asian Studies, Public Health and International Studies	3.00	20	TTh 3:00-4:15PM
AS.230.356	01	S		**Contemporary African Social Movements** *Scully, Benjamin Thomas*	3.00	20	TTh 3:00-4:15PM

Dean's Teaching Fellowship Courses

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is a survey of contemporary social movements in sub-Saharan Africa. The course will begin with an introduction to social movement theory. Subsequent weeks will each focus on a different type of movement (e.g. independence movements, labor movements, women's movements, environmental movements, etc.) The limited coverage of African issues in the US media tends to focus on either catastrophes or on development projects that are driven by international NGOs and the governments of northern countries. Through this course, students will gain a clear understanding of the broad range of actions that African civil society is using to address social problems throughout the continent. Materials used will include academic analysis of movements, writings by movement participants themselves, and films. The course will also introduce students to the most widely used social movement theories. Because these theories have been largely developed by social scientists in northern countries, the students will be asked to assess their applicability to African movements. Through this critical application of social theory, students will investigate the specific possibilities and constraints facing social and political actors in contemporary Africa. Cross listed with Dean's Teaching Fellowship, International Studies (CP) and Africana Studies.			
AS.280.217	01	S		**Youth Bullying, Aggression, and Public Health** *Duong, Jeffrey* This course examines bullying and aggression among school-aged youth from a public health perspective. We will explore the prevalence of bullying, theories about its etiology, and recent prevention efforts.	3.00	18	TTh 10:30-11:45AM
AS.280.304	01	S		**Transforming Disease: HIV/AIDS and the production of chronic illness** *Philbin, Morgan Mari* Drawing primarily on public health, anthropology, and sociology literature, the course critically examines debates surrounding the production of chronic illness, and resulting contestations as practices, laws, and policy are transformed.	3.00	18	MW 3:00-4:15PM

Earth & Planetary Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.270.107	01	N		**Introduction to Sustainability** *Parker, Cindy L* Will introduce interactions between global environment and humans, discuss meaning of sustainability, and introduce use of tools to attain sustainability such as policy, law, communication, marketing, research, advocacy, international treaties.	3.00	110	TTh 3:00-4:15PM
AS.270.114	01	N		**Guided Tour: The Planets** *Marsh, Bruce D* An introduction to planetary science and planetary exploration primarily for non-science majors. A survey of concepts from astronomy, chemistry, geology, and physics applied to the study of the solar system.	3.00	110	TTh 1:30-2:45PM
AS.270.210	01	N		**Environmental Field Methods** *Szlavecz, Katalin* This course is designed to introduce students to field based environmental research with a focus on the ecology and geochemistry of the surface and sub-surface environment. Field activities will center around soils and the carbon cycle in the riparian ecosystem adjacent to the Homewood campus and on the urban ecology of the greater Baltimore region. Students will build skills in data collection, analysis and synthesis. Outdoor fieldwork is an essential part of the course. Pre-requisites: 270.103 or 270.220.	3.00	15	F 12:00-4:00PM
AS.270.222	01	N		**Earth Materials** *Ferry, John* An introduction to the properties, occurrence, and origin of the basic constituents of the Earth, including minerals and rocks. Introductory training in the recognition of minerals and rocks in the laboratory and the field.	4.00	10	MWF 11:00-11:50AM; T 1:30-4:20PM
AS.270.312	01	N		**Mammalian Evolution** *Rose, Kenneth David* An introduction to the evolutionary history and diversity of mammals, with emphasis on the first half of the Cenozoic - the beginning of the Age of Mammals. The course will focus primarily on the adaptive radiation of mammals (including our own order primates) that followed the extinction of the dinosaurs, exploring the origins and relationships of the major groups of mammals as well as the anatomical and ecological reasons for their success. Lectures will be supplemented with relevant fossils and recent specimens.	3.00	30	MW 3:00-4:30PM
AS.270.313	01	N		**Isotope Geochemistry** *Passey, Benjamin H* Principles of equilibrium and kinetic isotope fractionation in fluid, solid and heterogeneous systems. Stable isotopes in the biosphere, hydrosphere and atmosphere. Reconstruction of past climatic and ecological settings. Stable isotopes in igneous and metamorphic systems. Introduction to radiogenic isotopes, geochronology, thermochronology, cosmogenic isotopes and “clumped” isotopes.	3.00	15	MW 3:00-4:15PM
AS.270.314	01	N		**Planetary Tectonics and Geodynamics**	3.00	20	WF 3:00-4:15PM

Earth & Planetary Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Roberts, James H Prereqs: 110.108-109 (or equiv); 171.101 or 171.105 (or equiv); Recommended: 110.202 (or equiv) Fundamental physical processes relevant to interiors of terrestrial planets and icy satellites. Topics include: stress and strain; elasticity and flexure; rheology; internal structure; thermal evolution; fluid mechanics; tectonics; and faulting.			
AS.270.315	01	N		**Natural Catastrophes** *Olson, Peter Lee* A survey of naturally occurring catastrophic phenomena, with emphasis on the underlying physical processes. Topics include hurricanes, tornadoes, lightning, earthquakes, tsunamis, landslides, and volcanic eruptions and climate change. Intended for students in science and engineering.	3.00	30	MWF 10:00-10:50AM
AS.270.325	01	N		**Introductory Oceanography** *Gnanadesikan, Anand* This class is an introduction to a wide range of physical, chemical, and biological phenomena in the world's oceans. Underlying basic principles are exposed wherever possible. Topics covered include: seawater, waves, tides, ocean circulation, chemical oceanography, biogeochemical ocean processes, and remote sensing of the oceans. Prerequisites: Freshman Physics, Chemistry, Calculus through ordinary differential equations.	3.00	20	MWF 1:30-2:20PM
AS.270.360	01	N		**Climate Change: Science & Policy** *Zaitchik, Benjamin* Prereq: 270.103 or permission of instructor. This course will investigate the policy and scientific debate over global warming. It will review the current state of scientific knowledge about climate change, examine the potential impacts and implications of climate change, explore our options for responding to climate change, and discuss the present political debate over global warming.	3.00	60	MW 1:30-2:45PM
AS.270.377	01	N		**Climates Of The Past** *Hinnov, Linda* Earth's climate history through study of forcing mechanisms, climate proxies, and paleoclimate modeling. Presentation of climate-sensitive archives will be followed by discussion of geochemical principles, climates through time, recent advances and emerging problems. For upper-level undergraduate and graduate students in the natural sciences. Prerequisite: AS.270.220, or instructors' permission.	3.00	30	TTh 1:30-2:45PM
AS.270.403	01			**Environmental Policymaking and Policy Analysis** *Bausch, Carl P*	3.00		T 6:00-9:00PM

Earth & Planetary Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course provides students with a broad introduction to US environmental policymaking and policy analysis. Included are a historical perspective as well as an analysis of future policymaking strategies. Students examine the political and legal framework, become familiar with precedent-setting statutes such as NEPA, RCRA, and the Clean Air and Clean Water Acts, and study models for environmental policy analysis. Cost benefit studies, the limits of science in policymaking, and the impact of environmental policies on society are important aspects of this course. A comparison of national and international policymaking is designed to provide students with the proper perspective.			
AS.270.496	01		W	**Senior Thesis** *Haine, Thomas* Preparation of a substantial thesis based upon independent student research, supervised by at least one faculty member in Earth and Planetary Sciences. Open to Senior departmental majors only. Required for department honors.	3.00	10	TBA
AS.270.496	02		W	**Senior Thesis**	4.00	10	TBA

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.100.348	01	HS	W	**20th-Century China** *Rowe, William T* Cross listed with East Asian Studies	3.00	75	TTh 10:30-11:45AM
AS.100.424	01	HS	W	**Women & Modern Chinese History** *Meyer-Fong, Tobie* This course examines the experience of Chinese women, and also how writers, scholars, and politicians (often male, sometimes foreign) have represented women's experiences for their own political and social agendas. Cross listed with East Asian Studies.	3.00	20	T 1:30-3:30PM
AS.100.482	01	HS		**Historiography Mod China** *Rowe, William T*	3.00	12	W 1:30-4:00PM
AS.190.330	01	S		**Japanese Politics** *Chung, Erin* This course introduces students to the major debates and issues of postwar Japanese politics. Topics include nationalism, electoral politics, civil society, and immigration.	3.00	20	MW 1:30-2:20PM; F 1:30-2:20PM
AS.190.330	02	S		**Japanese Politics**	3.00	20	MW 1:30-2:20PM; F 3:00-3:50PM
AS.230.228	01	S		**Colonialism in Asia and Its Contested Legacies** *Kuo, Huei-Ying* This seminar examines the theories and historiography of colonialism in Asia, with special focus on the development of British Straits Settlements and Hong Kong as well as Japanese Taiwan. We will review the competing discourses about the impact of colonial dominations in these areas from the 1800s to the present-day. In the beginning of the era, the British built up the economic linkage between Hong Kong and Penang, Malacca as well as Singapore to sustain its dominance throughout the "Far East." In the middle of the period, the expanding Japanese empire developed Taiwan as a footstep to compete with the British interests in South China and Southeast Asia. Hong Kong and the Straits Settlements, especially Singapore, became the contested terrain where two colonial powers vied for their influences in the region. The competition was not only about trade, but about the construction of a new East Asian regional order after the end of the Chinese hegemony. In the end of the period, the intervention of the US power in postwar Asia facilitated the retreat of the colonial establishments, British and Japanese ones included. The course that compares the colonial establishments and discourses on colonial legacies among the three areas points out that colonialism constituted an inalienable part of Asian history. Cross listed International Studies (CP) and East Asian Studies. Fufills History requirement for IS GSCD track students only.	3.00	20	TTh 1:30-2:45PM
AS.230.344	01	S	W	**Health and Society in Contemporary China** *Core, Rachel S*	3.00	20	TTh 3:00-4:15PM

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This class examines the social and health consequences of systemic transformations in China, including collapse of the urban work-unit system, resurgence of infectious disease, and implementation of the One-Child Policy. Dean's Teaching Fellowship; Cross listed with East Asian Studies, Public Health and International Studies			
AS.310.103	01	HS		**Modern Japan - 1800 to the Present** *Bronson, Adam* An introduction to the history of Japan from the 18th century to the present. In lectures and discussion we will draw upon a combination of primary source materials (political documents, memoirs, oral histories, journalism, fiction, film) and scholarly writings in order to gain insight into the complex and tumultuous process by which Japan became an industrialized society, a modern nation-state, and a world power.	3.00	30	MW 1:30-2:45PM
AS.310.108	01	H		**Introduction to Chinese Fiction and Drama** *Joo, Fumiko* This course will introduce Chinese fiction and drama from the Tang dynasty (618-906) to the early Republican period (1911-1949), such as the romantic dramas of Tang Xianzu and the uncanny tales of Pu Songling. Students will draw connection between these vibrant literary genres and the cultural and socio-historical events that shaped imperial China. Key topics include story-telling, romance, urban culture, gender, reincarnation, and many more. Students will acquire skills in how to read, analyze and discuss the rich legacy of Chinese fiction and drama in translation and to think critically about these writings. Reading materials are all in English.	3.00	25	MW 12:00-1:15PM
AS.310.207	01	H	W	**Mapping Migrations in East Asia** *Kim, Daisy Yuha* Recommended prereqs: any class related to the history or politics of Japan, Korea, Taiwan, and/or China. This seminar introduces students to the phenomenon of migration in Japan, South Korea, and Taiwan from theoretical, empirical, and comparative perspectives. The objectives of the course are to understand the 1) historical context behind present-day migrations in East Asia; 2) different patterns of migration flows and their consequences on receiving countries; 3) various theoretical frameworks for migration. The course is divided into three parts. In the first part, the course will examine theoretical approaches to migration, structured around the question of whether East Asia as a region represents a distinct model of migration. In the second, students will explore the empirical cases in greater detail by comparing and contrasting the different types of migrations. The third part addresses the responses to migration by host governments and societies and the implications of migration on citizenship and identity.	3.00	25	MW 4:30-5:45PM
AS.310.321	01	H		**Classical Chinese** *Staff*	3.00	20	MW 1:30-2:45PM

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course introduces the basic syntax, grammar and vocabulary of Classical Chinese or Literary Chinese (guwen□□/wenyan wen □□□), the written language from Old Chinese to the early twentieth century. Classical Chinese, which differs substantially form modern colloquial Chinese, is the language in which traditional Chinese historical, philosophical, religious and literary works are written. The structure, grammar and vocabulary of Classical Chinese still has large influence on modern Chinese formal documents and newspaper. Therefore, studying Classical Chinese is crucial not only to those who wish to understand original Chinese texts correctly but also to anyone who wants to attain a high level of reading proficiency in modern Chinese. Prereqs. AS.373.111-112, or AS.373.115-116 and AS373.211-212, or AS.373.215-216. Course is designed for students who have taken a minimum of two years of Modern Chinese.			
AS.310.356	01	HS	W	**The Buddhist Experience** *Valentine, Jay Holt* This writing intensive course is a survey of Buddhist history, thought, and culture that employs seminal works from both historians of religion and cultural anthropologists. Successful completion of this course will also provide students with a critical understanding of the daily experiences of Buddhists in India, Sri Lanka, Thailand, Tibet, China, Japan and the West. Students will express their understanding of the major theoretical developments in the study of Buddhism through a series of analytical essays.	3.00	30	TTh 4:30-5:45PM
AS.310.432	01	S	W	**Senior Thesis Seminar: East Asian Studies** *Andreas, Joel* This course is the continuation of Senior Thesis Course 360.431 for students completing their thesis in the East Asian Studies program.	3.00	10	None
AS.373.112	01			**First Year Heritage Chinese II** *Lievens, Liman* Prereq: 373.111 or Perm Req'd. Lab Req'd. Continuation of 373.111. For students who have significant, previously acquired ability to understand and speak Modern Standard Chinese. Course focuses on reading and writing. Teaching materials are the same as used in 373.115-116; however, both traditional and simplified versions of written Chinese characters are used. Cross-listed with East Asian Studies	3.00	15	MWF 11:00-11:50AM
AS.373.112	02			**First Year Heritage Chinese II**	3.00	15	MWF 12:00-12:50PM

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.373.116	01			**First Year Chinese II** *Li, Lu* Prereq: 373.115 or Perm. Req'd Continuation of 373.115. Introductory course in Modern Standard Chinese. Goals: mastery of elements of pronunciation and control of basic vocabulary of 800-900 words and most basic grammatical patterns. Students work first with Pin-Yin system, then with simplified version of written Chinese characters. Note: Student with existing demonstrable skills in spoken Chinese should take 373.111-112. Cross-listed with East Asian Studies	4.50	18	MWF 9:00-9:50AM; TTh 9:00-9:50AM
AS.373.116	02			**First Year Chinese II**	4.50	18	MWF 11:00-11:50AM; TTh 9:00-9:50AM
AS.373.116	03			**First Year Chinese II**	4.50	18	MWF 12:00-12:50PM; TTh 3:00-3:50PM
AS.373.116	04			**First Year Chinese II**	4.50	18	MWF 3:00-3:50PM; TTh 3:00-3:50PM
AS.373.212	01	H		**Second Year Heritage Chinese II** *Chen, Aiguo* Prereq: 373.211 or Perm Req'd. Continuation of 375.211. For students who have significant, previously acquired ability to understand and speak Modern Standard Chinese. Course focuses on reading and writing. Teaching materials are the same as used in 373.115-116; however, both traditional and simplified versions of written Chinese characters are used. Cross-listed with East Asian Studies	3.00	15	MWF 11:00-11:50AM
AS.373.212	02	H		**Second Year Heritage Chinese II**	3.00	15	MWF 12:00-12:50PM
AS.373.216	01	H		**Second Year Chinese II** *Chen, Aiguo* Perm Req'd. Consolidation of the foundation that students have laid in their first year of study and continued drill and practice in the spoken language, with continued expansion of reading and writing vocabulary and sentence patterns. Students will work with both simplified and traditional characters. Note: Students who have native-like abilities in comprehension and speaking should take 373.211-212. Cross-listed with East Asian Studies	4.50	23	MWF 9:00-9:50AM; TTh 12:00-12:50PM
AS.373.216	03	H		**Second Year Chinese II**	4.50	23	MWF 12:00-12:50PM; TTh 3:00-3:50PM
AS.373.314	01	H		**Third Year Heritage Chinese II** *Chen, Aiguo* Prereq: 373.313 or equivalent This course is a continuation of 373.313. Students need to have native-level fluency in speaking and understanding Chinese. The course focuses on reading and writing. In addition to the textbooks, downloaded articles on current affairs may also be included on a regular basis. Lab required.	3.00	15	MWF 10:00-10:50AM
AS.373.316	01	H		**Third Year Chinese II** *Lievens, Liman*	3.00	15	MWF 10:00-10:50AM

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 373.315 or Perm Req'd. Continuation of 373.315. This two-semester course consolidates and further expands students' knowledge of grammar and vocabulary and further develops reading ability through work with textbook material and selected modern essays and short stories. Class discussions will be in Chinese insofar as feasible, and written assignments will be given. Cross-listed with East Asian Studies			
AS.373.416	01	H		**Fourth Year Chinese II** *Lievens, Liman* Continuation of 373.415. Readings in modern Chinese prose, including outstanding examples of literature, newspaper articles, etc. Students should understand most of the readings with the aid of a dictionary, so that class discussion need not focus primarily on detailed explanations of grammar. Discussion, to be conducted in Chinese, will concentrate on the cultural significance of the readings' content. Cross-listed with East Asian Studies	3.00	15	MWF 3:00-3:50PM
AS.373.451	01	H		**Topics in Chinese Media** *Zhao, Nan* Prereq: Completion of four years of Chinese language or its equivalent. The main focus of this course is to expand the student's knowledge of four essential skills in Chinese language and to deepen the student's knowledge of Chinese culture. The course is taught based on various written and visual materials (including newspapers, journals, TV, movies, and short novels) to improve students' reading comprehension, maintain conversation skills through class discussion, increase understanding of the culture and society of China, and enhance writing ability through short compositions and a writing project. Cross-listed with Asian Studies.	3.00	18	TTh 10:30-11:45AM
AS.378.116	01			**First Year Japanese II** *Nakao, Makiko Pennington* Prereq. 378.115. This course is designed for students who have no background or previous knowledge in Japanese. The course consists of lectures on Tuesday/Thursday and conversation classes on Monday/Wednesdays/Fridays. The goal of the course is the simultaneous progression of four skills (speaking, listening, writing, and reading) as well as familiarity with aspects of Japanese culture. By the end of the fall term, students will have basic speaking and listening comprehension skills, a solid grasp of basic grammar items, reading and writing skills, and a recognition and production of approximately 60 kanji in context. Knowledge of grammar will be expanded significantly in 2nd year Japanese. May not be taken S/U. Cross-listed with East Asian Studies	4.50	16	MWF 10:00-10:50AM; TTh 10:30-11:20AM
AS.378.116	02			**First Year Japanese II**	4.50	16	MWF 12:00-12:50PM; TTh 12:00-12:50PM
AS.378.116	03			**First Year Japanese II**	4.50	16	MWF 11:00-11:50AM; TTh 12:00-12:50PM

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.378.216	01	H		**Second Year Japanese II** *Katagiri, Satoko* Prereq: 378.215 or equivalent Lab required Limit 15 per section Continuation of Beginning Japanese and Intermediate Japanese I; Training in spoken and written language, increasing their knowledge of more complex patterns. At completion, students will have a working knowledge of about 250 Kanji. Cross-listed with East Asian Studies	4.50	16	MWF 11:00-11:50AM; TTh 10:30-11:20AM
AS.378.216	02	H		**Second Year Japanese II**	4.50	16	MTWThF 12:00-12:50PM
AS.378.316	01	H		**Third Year Japanese II** *Katagiri, Satoko* Prereq: 378.315 or equivalent. Continuation of 378.315. Emphasis shifts toward reading, while development of oral-aural skills also continues apace. The course presents graded readings in expository prose and requires students to expand their knowledge of Kanji, grammar, and both spoken and written vocabulary. Lab required. Cross-listed with East Asian Studies	3.00	16	MWF 9:00-9:50AM
AS.378.416	01	H		**Fourth Year Japanese II** *Nakao, Makiko Pennington* Prereq: 378.415 Lab Req'd. By using four skills in participatory activities (reading, presentation, and discussion), students will develop reading skills in modern Japanese and deepen and enhance their knowledge on Kanji and Japanese culture. Cross-listed with East Asian Studies	3.00	15	MW 1:30-2:50PM
AS.380.102	01			**First Year Korean II** *Kang, Choonwon* Prereq: 380.101 or Perm. Req'd. Continuation of 380.101. Focuses on improving speaking fluency to Limited Proficiency so that one can handle simple daily conversations with confidence. It provides basic high-frequency structures and covers Korean holidays. Cross-listed with East Asian Studies	3.00	16	MWF 9:00-9:50AM
AS.380.202	01	H		**Second Year Korean II** *Kang, Choonwon* Prereq: 380.201 or equivalent. Continuation of 380.201. Aims for improving writing skills with correct spelling. Reading materials of Korean people, places, and societies will enhance cultural understanding and awareness, including discussion on family tree. Cross-listed with East Asian Studies	3.00	16	MWF 10:00-10:50AM
AS.380.302	01	H		**Third Year Korean II** *Kang, Choonwon* Prereq: 380.301 or equivalent. Continuation of 380.301. Emphasizes reading literacy in classic and modern Korean prose. By reading Korean newspapers and professional articles in one's major, it enables one to be well-versed and truly literate. Cross-listed with East Asian Studies	3.00	16	MW 12:00-1:15PM
EN.570.407	01	S		**Comparison of Environmental Challenges and Governance in China and the US** *Bouwer, Edward J*	3.00	30	Th 7:00-9:30PM

East Asian Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				In cooperation with the School of the Environment at Nanjing University, Nanjing, China, this course will study China's environmental challenges and governance in the context of America's own environmental challenges and governance system. Case studies will involve greenhouse gas emissions and a comparison of water quality issues in Tai Lake and the Chesapeake Bay. We will consider how developments may shape business, government, and culture, and the ways in which China and America may learn from one another. The class sessions will be conducted in part "live," in part by teleconference with Nanjing University, and in part by web (including communications with Nanjing University students and faculty). The objectives for the course are to 1) Provide students with basic information and concepts-of law, business, and governance needed to understand 21st century environmental governance challenges; 2) Provide students exposure to important environmental problems facing both China and America; 3) Provide students with alternative frameworks needed to sift through and understand the wealth of information about environmental challenges and opportunities faced by China in the globalized world; and 4) Encourage students to learn to observe and think independently about how to frame and address questions of China environmental challenges and governance which may be key to the 21st century.			

Economics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.180.102	01	S		**Elem of Microeconomics** *Hamilton, Bruce W* An introduction to the economic system and economic analysis with emphasis on demand and supply, relative prices, the allocation of resources, and the distribution of goods and services; theory of consumer behavior, theory of the firm, and competition and monopoly, including the application of microeconomic analysis to contemporary problems. Prerequisite: basic facility with graphs and algebra. *Students who are looking to register for 180.102 and need to take the course should attend class on 1/28 and see Dr. Hamilton immediately afterwards*	3.00	22	MW 9:00-9:50AM; F 9:00-9:50AM
AS.180.102	02	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; F 9:00-9:50AM
AS.180.102	03	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; F 9:00-9:50AM
AS.180.102	04	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	05	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 9:00-9:50AM
AS.180.102	06	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 9:00-9:50AM
AS.180.102	07	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 9:00-9:50AM
AS.180.102	08	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 10:30-11:20AM
AS.180.102	09	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 10:30-11:30AM
AS.180.102	10	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 10:30-11:20AM
AS.180.102	11	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 10:30-11:20AM
AS.180.102	12	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 10:30-11:20AM
AS.180.102	13	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 10:30-11:20AM
AS.180.102	14	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	15	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-1:00PM
AS.180.102	16	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	17	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	18	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	19	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	20	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 12:00-12:50PM
AS.180.102	21	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 1:30-2:20PM
AS.180.102	22	S		**Elem of Microeconomics**	3.00	22	MW 9:00-9:50AM; Th 1:30-2:20PM
AS.180.102	23	S		**Elem of Microeconomics**	3.00	18	MW 9:00-9:50AM; F 9:00-9:50AM
AS.180.102	24	S		**Elem of Microeconomics**	3.00	18	MW 9:00-9:50AM; F 9:00-9:50AM
AS.180.215	01	S		**Game Theory-Social Sci** *Karakas, Leyla Derin* This course provides an introduction to game theory with an emphasis on applications. Applications in economics, political science, business, military science, history, biology, theology and recreation will be covered. No prior knowledge of game theory is presumed and the required mathematical background is minimal (high school algebra and one term of calculus will be sufficient).	3.00	140	TTh 1:30-2:45PM
AS.180.242	01	S		**Internat Monetary Econ** *Jeanne, Olivier*	3.00	125	TTh 12:00-1:15PM

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Balance of payments concepts and the trade balance, exchange rates and the foreign exchange market, expectations, interest rates and capital flows, central banking and monetary policy in open economies, exchange rate regimes and macroeconomic policy. Prereq: 180.101-102 Formerly 180.342			
AS.180.243	01	S		**Memorandums of Misunderstanding** *Seneviratne, Prathibashi* For centuries, international trade has been a source of intense debate within and among nations. Proponents of free trade claim that trade benefits all nations in terms of higher incomes, lower consumer prices, and greater product variety. Opponents point to the painful economic adjustments that accompany the removal of trade barriers. In recent years, the debate has expanded to include labor rights, the environment, health and safety, intellectual property, and national sovereignty. Through the lens of economic theory, we will evaluate the arguments put forth by proponents and opponents of free trade. We will apply these theories to several case studies, with a particular focus on the conflicts that have arisen since the establishment of the World Trade Organization. Prereq. AS.180.102	3.00	25	F 1:30-4:00PM
AS.180.266	01	S		**Finan Mrkts/Institutions** *Warusawitharana, Missaka* Prereq: 180.101-102	3.00	125	W 1:30-4:00PM
AS.180.302	01	S		**Macroeconomic Theory** *Ball, Laurence M* Prereq: 180.101 and 180.102 and a course in calculus. The course provides a treatment of macroeconomic theory including a static analysis of the determination of output, employment, the price level, the rate of interest, and a dynamic analysis of growth, inflation, and business cycles. In addition, the use and effectiveness of monetary and fiscal policy to bring about full employment, price stability, and steady economic growth will be discussed.	4.50	42	TTh 9:00-10:15AM; W 7:00-8:30PM
AS.180.302	02	S		**Macroeconomic Theory**	4.50	42	TTh 9:00-10:15AM; T 5:30-7:00PM
AS.180.302	03	S		**Macroeconomic Theory**	4.50	41	TTh 9:00-10:15AM; T 7:00-8:30PM
AS.180.302	04	S		**Macroeconomic Theory**	4.50	41	TTh 9:00-10:15AM; W 5:30-7:00PM
AS.180.334	01	QS		**Econometrics** *Balat, Jorge F* Introduction to the methods of estimation in economic research. The first part of the course develops the primary method employed in economic research, the method of least squares. This is followed by an investigation of the performance of the method in a variety of important situations. The development of a way to handle many of the situations in which ordinary least squares is not useful, the method of instrumental variables, concludes the course. Prerequisites: Statistical Analysis (550.111 or 550.420); Pre- or Co-requisites 180.301 AND 180.302.	3.00	30	TTh 10:30-11:45AM; F 4:00-4:50PM

Economics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.180.334	02	QS		**Econometrics**	3.00	30	TTh 10:30-11:45AM; Th 3:00-3:50PM
AS.180.336	01	S		**Economic Forecasting** *Barbera, Robert* Will sketch out a strategy for anticipating economic turning points. Business cycle basics, monetary policy/financial market/real economy interactions will be reviewed. Long-term growth issues will be explored. Prereq: 180.101-102, 180.302 or Perm. Req'd.	3.00	25	Th 1:00-3:30PM
AS.180.351	01	S		**Labor Economics** *Morgan, Barbara Anne* This a one semester course in labor economics for undergraduate students. Labor economics is the study of labor markets. We will survey a broad range topics: labor supply and demand, employment contracting and personnel economics, labor unions, investments in education and training, discrimination, and patterns of inequality. We will also discuss applications of economic theory to important public policy issues such as minimum wage laws, welfare reform, financial aid for college, and affirmative action. In addition, this course will survey basic empirical patterns and issues concerning the labor market in the US and other developed countries.	3.00	25	MW 12:00-1:15PM
AS.180.368	01	S		**Managerial Econ/Business Strategies** *Knapp, J. Barclay* Prereq: 180.301, 550.111, and either 180.367 or 551.302 or Perm. Req'd. Seminar on quantitative concepts, decision-making, and strategy in business organizations. Overall context is 'value' – how it is measured and maximized long term. Microeconomic theory of the firm, competitive analysis, corporate finance.	3.00	25	M 1:30-4:00PM
AS.180.389	01	S		**Social Policy Implications of Behavioral Economics** *Papageorge, Nick W* Economists increasingly incorporate insights from psychology into models of rational decision-making. Known as "behavioral economics", this line of research considers how, for example, emotions, rules-of-thumb, biased beliefs and time-inconsistent preferences influence how we make choices. Behavioral economics increasingly pervades policy discussions on topics as diverse as: obesity, the role of media, subprime mortgages and voting patterns. Behavioral models are certainly novel, but do they help us to design superior social policies? With the goal of preparing students to address this question, this course (1) provides a thorough overview of the main contributions of behavioral economics, highlighting departures from more traditional economic models and (2) emphasizes how behavioral economic models might (or might not) improve how we think about social policy.	3.00	25	TTh 9:00-10:15AM

Economics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.180.390	01	S	W	**Health Economics & Developing Countries** *Gersovitz, Mark* Prereq: 180.301 Benefits of good health and its costs. Health demand and supply in poor countries. Welfare economics of Public Health. Cross-listed with Public Health Studies	3.00	12	M 3:00-5:30PM
AS.180.393	01	S	W	**Economics of Africa** *Gersovitz, Mark* Discussion of the economic experience of post-colonial Africa emphasizing topics rather than a historical narrative: agriculture, manufacturing, trade, population, education, health, public finances among others. Students are responsible for a research paper, topic choice and paper development in close consultation with the instructor, students to give a class presentation on paper findings. Course qualifies as writing intensive for the writing requirement.	3.00	12	T 3:00-5:30PM
EN.570.428	01	S	W	**Problems in Applied Economics** *Hanke, Steve H* Permission Required. This course brings the principles of economic theory to bear upon particular problems in the fields of economics, finance and public policy. Micro, macro and international problems, from both the private and public sectors, are addressed. A heavy emphasis is placed on research and writing. Students learn how to properly conduct substantive economic research, utilizing statistical techniques and lessons from economic history. Findings are presented in the form of either memoranda or working papers. Exceptional work may be suitable for publication through the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise.	3.00	20	TBA
EN.570.470	01	QS	W	**Applied Econ & Finance** *Hanke, Steve H* Prerequisite EN.660.203 – Permission Required. This course focuses on company valuations, using the proprietary Hanke-Guttridge Discounted Free Cash Flow Model. Students use the model and data from financial statements filed with the Securities and Exchange Commission to calculate the value of publicaly-traded companies. Using Monte Carlo simulations, students also generate forecast scenarios, project likely share-price ranges and assess potential gains/losses. Stress is placed on using these simulations to diagnose the subjective market expectations contained in current objective market prices, and the robustness of these expectations. During the weekly seminar, students' company valuations are reviewed and critiqued.	3.00	20	F 1:30-4:30PM
EN.570.487	01	S	W	**Financial Market Research** *Hanke, Steve H*	3.00	20	TBA

Economics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Permission Required. This course investigates the workings of financial, foreign exchange, and commodity futures markets. Research is focused on price behavior, speculation, and hedging in these markets. Extensive research and writing is required. Exceptional work may be suitable for publication through the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise.			

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.060.100	01	H	W	**Intro Expository Writing** *Evans, William* Introduction to “Expos” is designed to introduce less experienced writers to the elements of academic argument. Students learn to recognize the paradigm of academic argument as they learn to read and summarize academic essays, and then they apply the paradigm in academic essays of their own. Classes are small, no more than 10 students, and are organized around three major writing assignments. Each course guides students’ practice through pre-writing, drafting, and revising, and includes discussions, workshops, and tutorials with the instructor. In addition to its central focus on the elements of academic argument, each “Intro” course teaches students to avoid plagiarism and document sources correctly. “Intro” courses do not specialize in a particular topic or theme and are available to freshmen only.	3.00	10	MW 3:00-4:15PM
AS.060.100	02	H	W	**Intro Expository Writing** *Brodsky, Anne-Elizabeth Murdy*	3.00	10	TTh 10:30-11:45AM
AS.060.100	03	H	W	**Intro Expository Writing**	3.00	10	TTh 12:00-1:15PM
AS.060.107	01	H	W	**Introduction to Literary Study** *Thompson, Mark C*	3.00	20	TTh 10:30-11:45AM
AS.060.107	02	H	W	**Introduction to Literary Study** *Rosenthal, Jesse Karl*	3.00	20	MW 3:00-4:15PM
AS.060.114	01	H	W	**Expository Writing: The Cognitive Science of Religion** *Waterman, John Philip* “Expos” is designed to introduce more confident student writers to the elements of academic argument. Students learn to apply the paradigm of academic argument in academic essays of their own. Classes are capped at 15 students and organized around four major writing assignments. Each course guides students’ practice through pre-writing, drafting, and revising, and includes discussions, workshops, and tutorials with the instructor. In addition to its central focus on the elements of academic argument, each “Expos” course teaches students to document sources correctly and provides its own topic or theme to engage students’ writing and thinking. Please see the following list of individual course descriptions to decide which sections of “Expos” will most interest you. “Expos” courses are available to freshmen, sophomores, and juniors, and to seniors by special permission.	3.00	15	MWF 9:00-9:50AM
AS.060.114	02	H	W	**Expository Writing: Balancing Freedom and Security, Past & Present** *Webber, Robert Paul*	3.00	15	MWF 10:00-10:50AM
AS.060.114	03	H	W	**Expository Writing: American Gothic** *Zecca, Amanda Elizabeth*	3.00	15	MWF 11:00-11:50AM
AS.060.114	04	H	W	**Expository Writing: The American Wild** *Higney, Robert*	3.00	15	MWF 11:00-11:50AM
AS.060.114	05	H	W	**Expository Writing: The Utopian Imagination** *Wexler, Anthony Charles*	3.00	15	MW 12:00-1:15PM
AS.060.114	06	H	W	**Expository Writing: Politics and Violence** *Oppel, George*	3.00	15	MW 12:00-1:15PM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.060.114	07	H	W	**Expository Writing: Politics and Violence**	3.00	15	MW 1:30-2:45PM
AS.060.114	08	H	W	**Expository Writing: Religion and Violence in the U.S., 1851-2001** *Matsui, John H*	3.00	15	MW 1:30-2:45PM
AS.060.114	09	H	W	**Expository Writing: Romeo and Juliet and the Nature of Love** *Chilton, Jacob Israel*	3.00	15	MW 3:00-4:15PM
AS.060.114	10	H	W	**Expository Writing: Captivity and Freedom** *Shreve, Grant Blaine*	3.00	15	TTh 9:00-10:15AM
AS.060.114	11	H	W	**Expository Writing: The Body in Renaissance Art** *Libina, Maria*	3.00	15	TTh 10:30-11:45AM
AS.060.114	12	H	W	**Expository Writing: James Joyce's Dubliners** *Zhang, Nan*	3.00	15	TTh 10:30-11:45AM
AS.060.114	13	H	W	**Expository Writing: Maps and the Geographic Imagination** *Schley, David Holran*	3.00	15	TTh 12:00-1:15PM
AS.060.114	14	H	W	**Expository Writing: Fairy Tales** *O'Connor, Marie T*	3.00	15	TTh 12:00-1:15PM
AS.060.114	15	H	W	**Expository Writing: Fairy Tales**	3.00	15	TTh 1:30-2:45PM
AS.060.114	16	H	W	**Expository Writing: Hitchcock** *Sisson, Andrew Reynolds*	3.00	15	TTh 1:30-2:45PM
AS.060.114	17	H	W	**Expository Writing: The Power and Perils of Irony** *Maioli, Roger*	3.00	15	TTh 1:30-2:45PM
AS.060.114	18	H	W	**Expository Writing: The Choice of Freedom** *Flaherty, Matthew Thomas*	3.00	15	TTh 3:00-4:15PM
AS.060.138	01	H	W	**No "I" in "News": The New Journalism, Hunter S. Thompson to David Foster Wallace** *Tye, Douglas Allen* In 1972, Tom Wolfe noticed a trend in magazine reporting that he called “a ‘new’ journalism, a ‘higher’ journalism.” This novel breed of reporting, he claimed, was “causing panic, dethroning the novel as the number one literary genre, starting the first new direction in American literature in half a century.” It goes without saying that Wolfe considered himself on the cutting edge of the revolution. With no pretense of objectivity, the new journalists unapologetically wrote themselves into stories, stylizing their narratives with the techniques of fiction and recasting fact to suit their intended effect. This course will survey the field of new journalism, from Hunter S. Thompson’s drug-fueled, “gonzo” exposé of Southern culture, “The Kentucky Derby is Decadent and Depraved,” to mild-mannered George Plimpton’s chronicle of his tenure as a middle-aged professional football player, Paper Lion: Confessions of a Last-String Quarterback. We’ll also consider some of the movement’s precursors and heirs, from Stephen Crane’s efforts to brave the heat of battle as a war correspondent to David Foster Wallace’s attempt to understand the mild pleasures (and existential terrors) of a cruise ship vacation, “A Supposedly Fun Thing I’ll Never Do Again.”	3.00	18	MW 3:00-4:15PM
AS.060.139	01	H	W	**Expository Writing: The Essay** *Kain, Patricia*	3.00	12	MW 1:30-2:45PM
AS.060.142	01	H	W	**Censorship and Modern Literature**	3.00	18	MWF 9:00-9:50AM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Day, Robert D. Whether because of its religious or political dissent, sexual deviance, or corrupting effects on readers, literature has often been perceived as threatening the social order. In this course, we will read a variety of famous literary works, which have each been censored, banned, or subject to public outrage. Alongside each work, we will also read documents related to that work's suppression, such as reviews, court proceedings, and statements by the authors themselves. We will consider the ways in which literature is both the result of individual artistic achievement, and shaped by its social context. Possible authors include Oscar Wilde, Djuna Barnes, D.H. Lawrence, Vladimir Nabokov, Allen Ginsberg, Salman Rushdie, and Brett Easton Ellis. (This course is for non-majors) (Limit 18)			
AS.060.158	01	H	W	**Advertising and Literary Modernism** *Wedekind, Kara* To say that certain modernist authors were skeptical about the growing power of advertising would be an understatement. H.G. Wells described it as a form of “legalized lying,” while F. Scott Fitzgerald quipped that “its constructive contribution to humanity is exactly minus zero.” Such views on marketing were hardly uncommon, as many modernist authors saw advertising as an enemy to true artistic creation. The modernist response to this form of popular culture, however, was not uniformly hostile. Avant-garde artists, who rejected mainstream commercial values, often turned to newspaper ads and posters for the material that they would repurpose for their own work. In the stream of consciousness epic Ulysses, the protagonist works in advertising and his eye is often drawn to the notices and promotions that cover the streets of Dublin. Virginia Woolf even pauses her narrative to depict a fictional crowd of Londoners contemplating an airplane writing an ad in smoke letters. This course will explore the variety of stances toward advertising in the modernist period, as well as provide historical context. Novels include: "Sister Carrie", "The Ambassadors", "Mrs. Dalloway", "Turnabout", as well as selections from Ulysses. Critical sources include: Benjamin, Adorno, Williams, Moretti, Brown, and Butler. This course is for non-majors.	3.00	18	WF 12:00-1:15PM
AS.060.201	01	H		**The Nineteenth Century British Novel** *Rosenthal, Jesse Karl* Reading major novelists from the nineteenth century including Austen, C. Brontë, Dickens, Eliot, Hardy, and Conrad. We will pay attention to formal conventions, and relation to social and historical context.	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.201	02	H		**The Nineteenth Century British Novel**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.201	03	H		**The Nineteenth Century British Novel**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.201	04	H		**The Nineteenth Century British Novel**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.260	01	H		**Ethic American Literature** *Neutill, Rani*	3.00	20	MW 11:00-11:50AM; F 11:00-11:50AM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This class is an introductory course in ethnic American literature. We will read Native American, Chicano, Latino, Asian American, and African American literatures. The class will pose questions such as: Why ethnic American literature? Why not simply American? What are the dissonances and similarities between these literary voices? We will explore themes such as identity, otherness, and the construction of race and Americanness. Readings in post 1945 -course will include works by authors such as James Baldwin, David Henry Hwang, Toni Morrison, Sherman Alexie, Junot Diaz, Sandra Cisneros, Maxine Hong Kingston, and Jhumpa Lahiri. (Limit 60)			
AS.060.260	02	H		**Ethic American Literature**	3.00	20	MW 11:00-11:50AM; F 11:00-11:50AM
AS.060.303	01	H	W	**Literature of London** *Valdez, Jessica R.* Ian Watt famously linked the rise of the novel with the rise of the city in his seminal work, "The Rise of the Novel". This course will survey British literature from the late eighteenth through the early twentieth century that features the city of London. Students will consider how the city and urban life change over the course of the nineteenth century and how they transform literary depictions and understandings of selfhood and the social imagination. They will examine how nineteenth-century literature represents the space of the city and how these efforts to depict the city cause formal and stylistic innovations. How does the compressed space of the city and its intense stimuli affect characters' sense of identity? Students will also consider the ways in which the city affects understandings of gender, class and race in these texts. The course will focus on the novel, but it will also include excerpts from newspapers, poetry and essays. Readings will include "Evelina", "Great Expectations", and "The Secret Agent".	3.00	18	TTh 12:00-1:15PM
AS.060.311	01	H	W	**On "Moral Insanity": Self-Control in Victorian Philosophy, Psychology, and Fiction** *Fessenbecker, Patrick*	3.00	18	TTh 9:00-10:15AM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Standard utilitarianism, the dominant philosophical account of moral agency in the Victorian period, has a surprisingly unsophisticated account of self-control: both Jeremy Bentham and John Stuart Mill thought it was relatively straightforward, insofar as agents reliably pursued whatever end appeared to promise the greatest gain in happiness with little psychic effort. But other forms of intellectual life in the period—the now-forgotten "Intuitionist" school, the pre-Freudian psychologists, and perhaps most importantly, an important series of Victorian novelists—recognized that agency was much more complex, and tried to work through the problem that J.C. Prichard called "moral insanity." Conceiving it as a situation where agents cannot for some reason pursue their own reflectively endorsed goals, these authors developed a variety of richly complex accounts of and treatments for the loss of self-control. In this class, we are going to explore those accounts at some length. To start with the utilitarian model as a backdrop to the more complex accounts, we will read selections from Jeremy Bentham and John Stuart Mill in which they lay out their pleasure/pain account of agency, and then work through a set of theoretical materials for use throughout the course. First, we'll examine the intuitionist views of agency from William Whewell and John Grote, who held that moral action essentially required mastering oneself in such a way as to perceive and act upon moral intuitions; then, we'll turn to analyses from Prichard, Forbes Winslow, Henry Mausley, and other early forerunners in the developing field of psychology, and situate these arguments within the philosophical context. With this theoretical frame in place, we will spend the bulk of the course reading a series of novels that address the question of self-control. Beginning with Jane Austen and Charlotte Brontë, we'll consider the ways in which these novels represent the relationship between desire, reflection			
AS.060.323	01	H	W	**Modern British Poetry** *Steedley, Elizabeth Anne* In this course, students will consider the emergence and development of modern British poetry. Beginning with Hopkins and Hardy, two of the forebears of modernist literature, students will read and discuss the war poems of Owen and Sassoon before turning to major modernist poets like Eliot, Pound, and Auden. By reading pertinent critical pieces by and biographical information about these poets, students will acquire an understanding of modernism's concern with form, its interest in experimentation, and its navigation of both tradition and modernity. Over the course of the semester, students will be asked to write three five-to-seven-page essays on the works previously covered in class. (Limit 18)	3.00	18	MW 3:00-4:15PM
AS.060.327	01	H	W	**Best Sellers in the Early Nineteenth Century: Sir Walter Scott, Lord Byron, and Jane Austen**	3.00	18	MW 12:00-1:15PM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Bujak, Nicholas Sir Walter Scott and Lord Byron were the best-selling authors of their day by a significant margin. In this course, we'll attempt to come to terms with their unprecedented success, which was felt within the business of the publishing industry as much as it was in the minds of their fellow writers. Readings include Scott's poems set in Scotland's legendary past, Byron's scandalous and heroic poems (including his masterpiece, "Don Juan"), as well as a novel by their less-popular contemporary, Jane Austen, whose formally elegant novels must be understood as drawing on and competing with the works of her age's most dominant literary figures. Additionally, we'll place a strong emphasis on understanding how the workings of the publishing industry affected not only the habits of reading, but also of writing, during this crucial period in literary history. Secondary readings will help to situate the authors and primary texts in their historical and literary context, and provide practical tools for literary analysis. Assignments will include weekly reading quizzes, response papers, and three longer papers. Required Texts: Walter Scott, "The Poetical Works of Walter Scott" Walter Scott, "Waverley" Lord Byron, "The Major Works" Benita Eisler, "Byron: Child of Passion, Fool of Fame" Jane Austen, "Emma" A Course Pack, to be purchased from University Readers			
AS.060.354	01	H	W	**Marlowe and Shakespeare's History Plays** *Vinter, Magdalena Lucy* The first folio of Shakespeare's works groups his plays into three categories: "Comedies," "Tragedies," and "Histories." This course will consider what a Renaissance history play was. What are the consequences of basing literature on real historical events? How do the ways in history has been dramatized on stage relate to renaissance understandings of history and to how we understand history today? We will read all ten of the plays classed as Histories in the Folio, along with two other Shakespeare plays based on British historical chronicles (King Lear and Cymbeline) and Christopher Marlowe's Edward II. We will also look at the chronicles and histories that served as sources for the playwrights, and theoretical discussions of the purpose and nature of history and literature from the early modern period. (Limit 18) Pre 1800 course	3.00		TTh 1:30-2:45PM
AS.060.361	01	H	W	**Literature, War, Trauma** *Sundquist, Eric J*	3.00	18	W 1:30-3:50PM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				With a focus on the post-World War II period, a world redefined by the cataclysmic events of the Holocaust and the atomic bombing of Hiroshima and Nagasaki (as well as the more widespread strategic aerial bombing of civilian targets in Europe and Japan), the course will consider the nexus of literature, war, and trauma across a range of modern works in English, supplemented by some works in translation. What does it mean to live in the shadow of the Holocaust and the ever-present threat of nuclear war? How can annihilation on such a scale be accommodated to historical, theological, and ethical understanding? What is the role of the imagination in addressing such questions? What if the war had had a different outcome? We will investigate the consequences for literature as it attempted to address such questions in fiction, memoir, and commentary. In addition to a range of historical and theoretical readings, we will concentrate on literary works of several kinds: as a point of departure a few primary works by figures such as Primo Levi "The Drowned and the Saved" and John Hersey "Hiroshima"; fictional and non-fictional ruminations on the war's legacy by figures such as Kurt Vonnegut "Slaughterhouse Five", D. M. Thomas "The White Hotel", Msuji Ibuse "Black Rain", and W. G. Sebald "On the Natural History of Destruction"; counterfactual narratives about the world that might have been, had the Axis powers prevailed, by figures such as Philip K. Dick "The Man in the High Castle", Ira Levin "The Boys from Brazil", Philip Roth "The Plot against America", and Michael Chabon "The Yiddish Policeman's Union"; and works in which the impact of catastrophic destruction is absorbed into other cultural arenas by figures such as Toni Morrison "Beloved", Don DeLillo "White Noise", and J. M. Coetzee "Elizabeth Costello". Readings are tentative and may be modified. Requirements: class participation, short writing exercises, and two longer papers.			
AS.060.372	01	H	W	**Melville,Poe,Hawthorne** *Cameron, Sharon* We will read major fiction by Poe, Melville, and Hawthorne, and consider how conceptions of identity are treated as psychological, philosophical, and historical problems in the writings of these authors. We will also be concerned with the formal inventions that accompany these mid-nineteenth century American investigations of personal identity, and with topics such as gothic horror; divinity; and the status of explanation.	3.00	18	F 1:30-3:50PM
AS.060.384	01	H	W	**Jane Austen and the Eighteenth-Century Novel** *Grener, Adam*	3.00	18	T 2:30-4:50PM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Although the robust presence of Jane Austen in popular culture attests to the broad historical appeal of her work, her novels are nevertheless deeply concerned with political, philosophical, and aesthetic questions of her own historical moment. In this course, we'll read Austen in the context of the late eighteenth-century novel in order to understand how she engages with her literary predecessors. We'll focus in particular on Austen's innovations in narrative form and technique, innovations that led one of her early critics to claim that she constituted a "new school of fiction." Readings by Austen will include "Northanger Abbey", "Sense and Sensibility", and "Pride and Prejudice" (all of which Austen conceived and began drafting in the 1790s), along with her "juvenilia." Other readings will include works by Ann Radcliffe, Mary Wollstonecraft, Frances Burney, Charlotte Smith, and Edmund Burke. Pre 1800 course			
AS.060.391	01	H	W	**Early American Literature** *Hickman, Jared W* This course will introduce students to major texts of the colonial Americas, primarily from English-speaking North America, but also from the non-Anglophone Americas (in translation). From recovered and reconstructed pre-Columbian indigenous oral stories to political declarations of independence, with spiritual autobiographies and epic poems in between, all variously authored by writers of European, African, and Native American origins, we will work to situate a vast array of fictional, nonfictional, poetic, and dramatic texts in historical context. Ever lurking in the background will be that seminal question: At what point does this literature become identifiably "American"? Or, we will ask, is this an anachronistic question to ask? This course will satisfy the pre-1800 major requirement. (Limit 18) Prerequisite: ILS, 200-level, or instructor approval	3.00	18	Th 1:30-3:50PM
AS.211.233	01	H		**Freshman Seminar - A History of Reading: from Gutenberg to Kindle** *Staff* Freshmen only. This course investigates the 18th-century revolution in reading – the pedagogical and aesthetic debates about the virtues and dangers of reading, idealizations and critiques of print culture, books as material objects, and the shifting concepts of both author and reader, and to what extent this historical period anticipates our own present day revolution in reading technologies.	3.00	10	TTh 3:00-4:15PM
AS.213.233	01	H		**Freshman Seminar - A History of Reading: from Gutenberg to Kindle** *Staff*	3.00	10	TTh 3:00-4:15PM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Freshmen only. This course investigates the 18th-century revolution in reading – the pedagogical and aesthetic debates about the virtues and dangers of reading, idealizations and critiques of print culture, books as material objects, and the shifting concepts of both author and reader, and to what extent this historical period anticipates our own present day revolution in reading technologies.			
AS.213.332	01	H	W	**Zionism in Modern Literature: Jewish or Israeli?** *Caplan, Marc* This course will be an examination of the themes of nationalism, Zionism, and the problems of the nation-state in modern Jewish literature of the past hundred years. Among the topics we will consider are the unique challenges of a diasporic culture relocating its national aspirations to an unfamiliar and often hostile environment, the controversies surrounding political nationalism within modern Jewish culture, the competition between languages in the formation of Israeli society, the character of Israeli national culture, the relationship of Israel's Jewish majority with its minority population, and the relationship of Israeli culture to the Jewish culture of the diaspora. To what extent does Israeli literature constitute a continuation of themes and techniques found in previous Jewish writing, and to what extent does it represent a new beginning? To what extent can Israeli literature be compared with other varieties of Jewish writing and to what extent is this writing a unique cultural phenomenon? Although the majority of works discussed will be translated from Hebrew—including such leading figures of Israeli literature as S. Y. Agnon, S. Yizhar, Amos Oz, and Orly Castel-Bloom—we will also be considering works translated from Yiddish (Mendele Moykher-Sforim), German (Theodor Herzl), and Arabic (Emile Habiby), as well as contemporary American writers such as Philip Roth and Michael Chabon. All readings and discussions conducted in English. Cross-listed with Jewish Studies, English, and the Humanities Center	3.00	50	MW 12:00-1:15PM
AS.361.316	01	HS		**Caribbean Writing in Shakespeare, V. S. Naipaul, and Alejo Carpentier** *Gonzalez, Eduardo* Readings and polemics concerned with Shakespeare´s play The Tempest (1610-1611) and its postcolonial afterlives; V. S. Naipaul´s novel A House for Mr. Biswas (1961); and Alejo Carpentier´s El siglo de las luces (1962). The socio historical and political contexts of each work and authorship will be considered in depth in terms of dominant notions of writing in current critical theory. Cross-listed with GRLL, English, and Writing Seminars.	3.00	20	M 1:30-3:50PM
AS.389.360	01	H		**American Literature on Display** *Dean, Gabrielle*	3.00	12	M 3:00-5:20PM

English

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Focusing on late 19th and early 20th c American literature, course examines representations of "display" within different literary genres and track how display simultaneously shapes print culture and social concerns of the period. Course culminates in the creation of a student-curated digital exhibit using archival and rare book materials to contextualize the work of the journalist, poet and fiction writer Stephen Crane. M&S practicum course.			

Film and Media Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.061.141	01	H		**Introduction to Cinema, 1941-present** *Bucknell, Lucy* Introduction to Cinema provides an overview of American and international cinema from the post World War II era to the present. Through lectures and discussion, weekly screenings, and intensive visual analysis of individual films, we will explore the aesthetic, cultural, political, and economic forces that have shaped the art and industry of film over the past 70 years. Regular quizzes, writing assignments, class participation required.	3.00	35	MT 7:30-10:00PM; W 1:30-3:50PM
AS.061.150	01	H		**Introduction to Film Production** *Mann, John* This course introduces students to the basic considerations of shooting 16mm film. Through lectures and practice, the course approaches the basics of light meter readings, basic camera operations and shot composition. Each week students, working in groups of three, shoot film exercises providing a general overview of film production. For the final project, each student shoots and edits (physical edits) a short (3-5 minutes) film on 16mm black and white reversal film stock.	3.00	12	M 12:00-2:30PM
AS.061.152	01	H		**Introduction to Digital Film** *Roche, Jimmy* This course introduces students to the complex world of digital filmmaking. Through screenings, production assignments, and in-class labs, students will develop proficiency in using digital video cameras, sound recording devices, and software to realize their artist visions. Students will work alone and in groups on several short videos. For their final project, students will pitch an idea and develop a more complex (5 - 10min) final work. Lab fee: $100	3.00	12	Th 1:30-3:50PM; Th 7:30-10:00PM
AS.061.209	01	H		**Surrealism and Film** *Yasinsky, Karen* We will define Surrealism through readings, including those of Andre Breton and Rene Daumal and texts that influenced the movement in the early part of the 20th c. Using an understanding of the practice of surrealism found in the readings as well as surrealist games and writing, we'll study a diverse group of filmmakers influenced by the practice including Joseph Cornell, Rene Clair, Luis Bunuel and contemporary artists such as Jack Chambers and David Lynch. Assignments include weekly papers and one final creative project.	3.00	9	T 3:00-5:20PM; S 4:30-7:00PM
AS.061.225	01	H		**Special Topics: Introduction to Animation** *Yasinsky, Karen*	3.00	8	M 3:00-5:20PM; Th 7:30-10:00PM

Film and Media Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Animation will be studied from a formal perspective, emphasizing the primacy of the single frame. Students will experiment with different hands-on techniques and materials, including drawing, collage, light and photo-based frames. Three short projects will be completed. Screenings will include the work of Otto Messmer, the Fleischer Brothers, Robert Breer, Norman McLaren, Len Lye, Lotte Reininger, Larry Jordan, Frank Mouris and others. Students should have a good knowledge of video editing.			
AS.061.227	01	H		**Going "On the Road": The Road Movie and American Cultural Identity** *DeLibero, Linda* This course explores the road film, one of the most popular thematic constructs in American film. Although the journey narrative has its roots in literature, the road film presents a unique variation of stories of wanderlust. Perhaps this is because cinema's very nature lends itself to the form; the art form entails the creation of space and motion in time. We will follow the road movie from classical cinema to the present, concentrating on its position as a central trope in American mythology but also looking at the ways filmmakers in other cultures have made use of it. Prereqs. AS.061.140 or AS.061.141	3.00	17	Th 4:00-6:20PM; T 7:30-10:00PM
AS.061.245	01	H		**Introduction to Film Theory** *Ward, Meredith C* This course offers an introduction to the major paradigms of film theory, with work ranging from Andre Bazin to Sergei Eisenstein. Frequent film screenings are designed to help illustrate film theory concepts. Designed around one operative question, “What is cinema?” the course explores the varied and divergent answers provided by the great thinkers of the cinema in the past century. Students are expected to enter the course ready to engage in discussion. Prereqs: AS.061.140 OR AS.061.141	3.00	15	W 7:30-10:00PM; T 1:30-3:50PM
AS.061.301	01	H		**Advanced Film Production** *Mann, John* In this course each student creates a short (3-10 minutes) film using color and/or black and white negative film. The project may include synchronized as well as non-synchronized sound. The projects are not limited by genre. Any one or a combination of genres is allowed, from conventional narrative to experimental to documentary. The projects will be shot in Super 16 format.	3.00	6	T 12:00-2:30PM
AS.061.339	01	H	W	**A Cinema Of Anxiety** *Bucknell, Lucy* Postwar film noir: Fuller, Huston, Lang, Mann, Tourneur, and others.	3.00	15	M 1:30-3:50PM; Th 7:30-10:00PM; S 7:00-9:30PM
AS.061.356	01	H		**Narrative Productions** *Porterfield, Matthew*	6.00	12	M 4:00-10:00PM

Film and Media Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is designed to immerse students in the creative and practical challenges of narrative production. It is our hope that you will emerge with a greater understanding of the professional structure of a film crew, as well as with an understanding of the collaborative creativity necessary to make a narrative short. We will work hard, but if you are interested in video, film and filmmaking, we guarantee you will learn a great deal. In this course students will be divided into teams, each of which will produce a short narrative film based upon a script written by a fellow student. All films will be fully student produced! From script to casting, production to direction, design, shooting and sound recording, music and editing, students will fill all principal roles. Throughout the course, instructors will expose students to relevant films and film professionals in order to illuminate the key creative roles necessary in the making of any film. Instructors will serve a guiding role in the production of student projects, offering technical information and guidance as to the creative, collaborative nature of the filmmaking process. Students will be evaluated not only on the films they produce, but also on their ability to create and contribute within a team to the collaborative art of filmmaking. Prereqs. AS.061.150 or AS.061.145 or AS.061.152			
AS.061.381	01	H		**Sound on Film** *Yasinsky, Karen* This 3-credit upper-level course, sponsored by the Film and Media Studies Program at JHU and the program in Recording Arts and Sciences at the Peabody Institute, will offer undergraduates and faculty/staff from both institutions an unprecedented opportunity to collaborate on all aspects of designing soundtracks for film. Utilizing in-progress and completed film projects, student filmmakers from the Film and Media Studies program will work with Peabody students to create soundtracks, from the initial phases of composition and scoring to the final stages of recording and sound syncing. Students will work in small teams in a lab setting to create their soundtracks, exploring a variety of scenarios, including the implications of image-driven music vs music-driven images, and the various uses of acoustic and electronic sound. The final products will be mastered for DVD and online format. Lab work will be supplemented by guest lectures and faculty presentations on various aspects—practical, theoretical, and historical—of applying sound to film. Guest lecturers will include sound designers and engineers, composers, editors, historians of film sound, and filmmakers working in both live action and animated film.	3.00	4	F 1:30-3:50PM
AS.061.397	01	H		**French Masculinities** *Mason, Laura*	3.00	18	Th 1:30-3:50PM; W 4:30-7:00PM

Film and Media Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Examines changing ideals of masculinity in France after 1960 as they found expression on film, rooting the work of iconic stars and directors in their cultural, political and historical contexts.			
AS.061.420	01	H		**The French New Wave** *Roos, Suzanne* Conducted in English Study of the major films of the French New Wave, their origins, context, and afterlife.	3.00		W 3:00-5:20PM; T 7:30-10:00PM
AS.061.441	01	H		**Sen Proj-Film Production** *Mann, John*	3.00		TBA
AS.061.443	01	H		**Sen Proj-Digital Video Prod** *Mann, John* Perm. Req'd.	3.00		TBA
AS.061.443	02	H		**Sen Proj-Digital Video Prod** *Porterfield, Matthew*	3.00		TBA
AS.070.262	01	HS		**Cuban Intellectuals, Cinema, and the State** *Humphreys, Laura Zoe* This course examines the relationship between intellectuals and the Cuban state, focusing on how cinema and other arts have been mobilized both as propaganda and as sites for social criticism.Cross-List: Film and Media Studies; PLAS; GRLL Special Notes Spring 2013: Screenings are required for this course and will take place on Tuesdays from 7 pm to 9:30 pm.	3.00	20	Th 1:30-3:50PM; T 7:00-9:30PM
AS.211.416	01	H		**Visual Languages in Medical Knowledge** *Wegenstein, Bernadette* This interdisciplinary course, co-taught by professor Veena Das (Anthropology) and Research professor and filmmaker Bernadette Wegenstein (German and Romance Languages and Literatures) will track the mediation of images in the making of medical knowledge and show how sensory knowledge is incorporated or transformed in the process. Co-listed with 214.616 and 070.416	3.00	15	W 3:00-5:30PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.061.397	01	H		**French Masculinities** *Mason, Laura* Examines changing ideals of masculinity in France after 1960 as they found expression on film, rooting the work of iconic stars and directors in their cultural, political and historical contexts.	3.00	18	Th 1:30-3:50PM; W 4:30-7:00PM
AS.070.262	01	HS		**Cuban Intellectuals, Cinema, and the State** *Humphreys, Laura Zoe* This course examines the relationship between intellectuals and the Cuban state, focusing on how cinema and other arts have been mobilized both as propaganda and as sites for social criticism.Cross-List: Film and Media Studies; PLAS; GRLL Special Notes Spring 2013: Screenings are required for this course and will take place on Tuesdays from 7 pm to 9:30 pm.	3.00	20	Th 1:30-3:50PM; T 7:00-9:30PM
AS.210.102	01			**French Elements II** *Staff* Prereq: 210.101 or 210.103 or Webcape score below 320. May not be taken Satisfactory / Unsatisfactory. Provides a multi-faceted approach to teaching language and culture to the novice French student. The emphasis of the course is an aural-oral proficiency without neglecting the other basic skills of grammar structure, phonetics, reading, and writing.	4.00	17	MWF 9:00-9:50AM; T 9:30-10:20AM
AS.210.102	02			**French Elements II**	4.00	17	MWF 10:00-10:50AM; T 9:30-10:20AM
AS.210.102	03			**French Elements II**	4.00	17	MWF 11:00-11:50AM; T 9:30-10:20AM
AS.210.102	04			**French Elements II**	4.00	17	T 9:30-10:20AM; MWF 12:00-12:50PM
AS.210.102	05			**French Elements II**	4.00	17	T 9:30-10:20AM; MWF 9:00-9:50AM
AS.210.111	01			**Spanish Elements I** *Staff* Development of the four basic language skills of reading, writing, listening and speaking. Extensive use of an online component delivered via Blackboard, sustained class participation, and three hourly exams (no midterm and no final). In order to receive credit for Spanish 111, Spanish 112 must also be completed with a passing grade. May not be taken satisfactory/unsatisfactory. No new enrollments for this course permitted after Friday, February 1st.	4.00	17	MWF 9:00-9:50AM
AS.210.111	02			**Spanish Elements I**	4.00	17	MWF 10:00-10:50AM
AS.210.112	01			**Spanish Elements II** *Staff* Prerequisite: Spanish Elements I or appropriate Placement Exam (Web-Cape) score. Continuation of Spanish Elements I. Further development of the four basic language skills of reading, writing, listening and speaking. Extensive use of an online component delivered via Blackboard , sustained class participation, and three hourly exams (no midterm and no final). May not be taken satisfactory/unsatisfactory. No new enrollments for this course permitted after Friday, February 1st.	4.00	17	MWF 9:00-9:50AM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.210.112	02			**Spanish Elements II**	4.00	17	MWF 10:00-10:50AM
AS.210.112	03			**Spanish Elements II**	4.00	17	MWF 11:00-11:50AM
AS.210.112	04			**Spanish Elements II**	4.00	17	MWF 11:00-11:50AM
AS.210.112	05			**Spanish Elements II**	4.00	17	MWF 12:00-12:50PM
AS.210.112	06			**Spanish Elements II**	4.00	17	MWF 12:00-12:50PM
AS.210.152	01			**Italian Elements II** *Staff* Course helps students develop basic listening, reading, writing, speaking, and interactional skills in Italian. The content of the course is highly communicative, and students are constantly presented with real-life, task-based activities. Course adopts a continuous assessment system (no mid-term and no final). May not be taken Satisfactory/ Unsatisfactory. Prerequisites: 210.151, or appropriate placement exam score (Part I)	4.00	17	MWF 9:00-9:50AM
AS.210.152	02			**Italian Elements II**	4.00	17	MWF 10:00-10:50AM
AS.210.152	03			**Italian Elements II**	4.00	17	MWF 11:00-11:50AM
AS.210.152	04			**Italian Elements II**	4.00	17	MWF 11:00-11:50AM
AS.210.152	05			**Italian Elements II**	4.00	17	MWF 12:00-12:50PM
AS.210.162	01			**German Elements II** *Staff* Continuation to the introduction to the German language and a development of reading, speaking, writing & listening through the use of basic texts and communicative activities. The culture of the German-language countries is also incorporated into the curriculum. May not be taken on a S/U basis. Prerequisites: AS.210.161 or Placement Exam. Choose your section based on MWF schedule. Tu hour is flexible.	4.00	17	MWF 9:00-9:50AM; T 9:00-9:50AM
AS.210.162	02			**German Elements II**	4.00	17	MWF 10:00-10:50AM; T 10:30-11:20AM
AS.210.162	03			**German Elements II**	4.00	17	MWF 11:00-11:50AM; T 12:00-12:50PM
AS.210.162	04			**German Elements II**	4.00	17	MW 3:00-4:15PM; T 10:30-11:20AM
AS.210.164	01	H		**Elementary Yiddish II** *Caplan, Beatrice* Prerequisites: 210.163 or Permission of the instructor Year-long course. Includes the four language skills--reading, writing, listening, and speaking--and introduces students to Yiddish culture through text, song, and film. Emphasis is placed both on the acquisition of Yiddish as a tool for the study of Yiddish literature and Ashkenazic history and culture, and on the active use of the language in oral and written communication. Both semesters must be taken with a passing grade to receive credit.	3.00	17	TTh 9:00-10:15AM
AS.210.178	01			**Portuguese Elements II** *Bensabat Ott, Mary M*	4.00	25	MWF 11:00-11:50AM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course expands students knowledge of the basic language skills: reading, writing, listening, speaking. It uses a multifaceted approach to immerse students in the cultures of Brazil, Portugal, and Portuguese-speaking Africa. The focus of the course is on oral communication with, however, extensive training in grammar. The course is conducted entirely in Portuguese. Lab work required. Students must complete both semesters with passing grades to receive credit. No satisfactory/unsatisfactory. Pre-requisites: 210.177, or placement test			
AS.210.202	01	H		**Intermediate French II** *Staff* Prerequisites: 210.201 or 210.203 or Webcape score between 320 and 420. Continuation of 210.201. Focus on oral communication; develops skills in oral and written expression, listening comprehension, and reading, with extensive study of films and readings from French-speaking countries. On-line component via Blackboard.	3.00	17	MWF 9:00-9:50AM
AS.210.202	02	H		**Intermediate French II**	3.00	17	MWF 10:00-10:50AM
AS.210.202	03	H		**Intermediate French II**	3.00	17	MWF 11:00-11:50AM
AS.210.202	04	H		**Intermediate French II**	3.00	17	MWF 11:00AM-11:50PM
AS.210.202	05	H		**Intermediate French II**	3.00	17	MWF 12:00-12:50PM
AS.210.202	06	H		**Intermediate French II**	3.00	17	MWF 12:00-12:50PM
AS.210.202	07	H		**Intermediate French II**	3.00	17	MWF 9:00-9:50AM
AS.210.211	01	H		**Intermediate Spanish I** *Staff* Prerequisites: 210.112 or appropriate Placement Exam (Web-Cape) score. Continues building on the four essential skills for communication presented in Spanish Elements courses. Extensive use of an online component delivered via Blackboard, sustained class participation, and three hourly exams (no midterm and no final). May not be taken satisfactory/unsatisfactory. No new enrollments for this course permitted after Friday, February 1st.	3.00	17	MWF 9:00-9:50AM
AS.210.211	02	H		**Intermediate Spanish I**	3.00	17	MWF 10:00-10:50AM
AS.210.211	03	H		**Intermediate Spanish I**	3.00	17	MWF 11:00-11:50AM
AS.210.211	04	H		**Intermediate Spanish I**	3.00	17	MWF 12:00-12:50PM
AS.210.212	01	H		**Intermediate Spanish II** *Staff* Continues building on the four essential skills for communication presented in Spanish Elements courses and in Intermediate Spanish I. Extensive use of an online component delivered via Blackboard, sustained class participation, and three hourly exams (no midterm and no final). May not be taken satisfactory/unsatisfactory. No new enrollments for this course permitted after Friday, February 1st.	3.00	17	MWF 9:00-9:50AM
AS.210.212	02	H		**Intermediate Spanish II**	3.00	17	MWF 10:00-10:50AM
AS.210.212	03	H		**Intermediate Spanish II**	3.00	17	MWF 11:00-11:50AM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.210.212	04	H		**Intermediate Spanish II**	3.00	17	MWF 12:00-12:50PM
AS.210.212	05	H		**Intermediate Spanish II**	3.00	17	MWF 12:00-12:50PM
AS.210.212	06	H		**Intermediate Spanish II**	3.00	17	MWF 3:00-3:50PM
AS.210.252	01	H		**Intermediate Italian II** *Staff* Taught in Italian. Course provides further development of students' language skills through intensive listening, speaking, reading, writing and interactional activities on topics of increasing complexity. Course adopts a continuous assessment system (no mid-term and no final). May not be taken Satisfactory/Unsatisfactory. Pre-req: 210.251 or appropriate placement exam scores (Parts I & II).	3.00	17	MWF 10:00-10:50AM
AS.210.252	02	H		**Intermediate Italian II**	3.00	17	MWF 11:00-11:50AM
AS.210.252	03	H		**Intermediate Italian II**	3.00	17	MWF 12:00-12:50PM
AS.210.262	01	H		**Intermediate German II** *Staff* Taught in German. This course is designed to continue the four skills (reading, writing, speaking and listening) approach to learning German. Readings and discussions are topically based and expanded upon through audio-visual materials. Students will also review and deepen their understanding of the grammatical concepts of German. Prereq: 210.261 or placement exam	3.00	17	MWF 10:00-10:50AM
AS.210.262	02	H		**Intermediate German II**	3.00	17	MWF 11:00-11:50AM
AS.210.262	03	H		**Intermediate German II**	3.00	17	MW 12:00-1:15PM
AS.210.266	01			**German Conversation** *Staff* This course is designed for students who wish to improve their conversational language skills, achieving up to an advanced level in oral production. The syllabus aims to provide useful, relevant language and necessary discourse structures to hold conversations on varied topics. Students will practice German to build confidence, develop fluency, and improve pronunciation and accuracy. Weekly topics will be determined to some extent by the interests and ability level of the group as a whole. Prerequisite: 210.262 or two years of college German or equivalent. May be taken concurrently with other courses in German. Students currently enrolled in 210.262 may take concurrently, with permission. May be taken Pass/Fail. Not for major or minor credit.	1.00	17	T 10:30-11:20AM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.210.278	01	H		**Intermed/Adv Portuguese** *Anitagrace, Joyce* This course is conducted entirely in Portuguese. Emphasis is placed on vocabulary building, ease and fluency in the language through the use of a multifaceted approach. Materials used immerse students in the cultures of Brazil, Portugal, and Portuguese-speaking Africa, and reflect the mix of cultures at work in the contemporary Lusophone world. Lab work required. No satisfactory/unsatisfactory. Prerequisites: 210.177, or placement test.	3.00	20	MWF 10:00-10:50AM
AS.210.302	01	H	W	**Advanced Writing and Speaking in French II** *Staff* Taught in French. Prereq: 210.301 or Webcape score and supplementary test (Contact Prof. Kristin Cook-Gailloud at kacg@mac.com) This is a third-year language course intended to bridge the intermediate level and more advanced levels in French literature and cultural studies. Students will be given the opportunity to continue strengthening their linguistic skills. Individualized review of grammar based on the students' written work. Students will be presented with a diversity of texts from current newspaper articles covering key national and international issues to a diversity of literary texts.	3.00	17	MWF 9:00-9:50AM
AS.210.302	02	H	W	**Advanced Writing and Speaking in French II**	3.00	17	MWF 10:00-10:50AM
AS.210.302	03	H	W	**Advanced Writing and Speaking in French II**	3.00	17	MWF 10:00-10:50AM
AS.210.302	04	H	W	**Advanced Writing and Speaking in French II**	3.00	17	MWF 11:00-11:50AM
AS.210.302	05	H	W	**Advanced Writing and Speaking in French II**	3.00	17	MWF 11:00AM-11:50PM
AS.210.302	06	H	W	**Advanced Writing and Speaking in French II**	3.00	17	MWF 12:00-12:50PM
AS.210.302	07	H	W	**Advanced Writing and Speaking in French II**	3.00	15	MWF 9:00-9:50AM
AS.210.311	01	H		**Advanced Spanish I** *Staff* Prerequisites – 210.212 or appropriate WebCape score A review and expansion of Spanish communicative skills. Students will be able to express opinions, narrate and describe in a variety of personal and professional contexts. Students will continue to improve linguistic proficiency while increasing cultural awareness. Students will also engage in more formal levels of written communication. This course also focuses on refinement of grammar. Extensive use of an online component delivered via Blackboard, sustained class participation, and three hourly exams (no midterm and no final). May not be taken satisfactory/unsatisfactory.	3.00	15	MWF 9:00-9:50AM
AS.210.311	02	H		**Advanced Spanish I**	3.00	15	MWF 10:00-10:50AM
AS.210.311	03	H		**Advanced Spanish I**	3.00	15	MWF 11:00-11:50AM
AS.210.311	04	H		**Advanced Spanish I**	3.00	15	MWF 12:00-12:50PM
AS.210.312	01	H		**Advanced Spanish II** *Staff*	3.00	15	MWF 10:00-10:50AM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites – 210.311 (Advanced Spanish) or appropriate WebCape score An in-depth review and expansion of Spanish communicative skills by focusing on the use of standard, spoken Spanish with an emphasis on colloquial and idiomatic expressions. Students will continue to improve linguistic proficiency while increasing cultural awareness, as well as engage in more formal levels of communication by discussing assigned literary and non-literary topics. They will increase their listening skills through movies and other listening comprehension exercises. The course will also focus on vocabulary acquisition. Extensive use of an online component delivered via Blackboard, sustained class participation, and three hourly exams (no midterm and no final). May not be taken satisfactory/unsatisfactory. Prerequisites: 210.311 (Advanced Spanish) or appropriate WebCape score.			
AS.210.312	02	H		**Advanced Spanish II**	3.00	15	MWF 11:00-11:50AM
AS.210.312	03	H		**Advanced Spanish II**	3.00	15	MWF 12:00-12:50PM
AS.210.313	01	H		**Medical Spanish** *Martinez-Velez, Naiara* Prerequisites – 210.311 (Advanced Spanish I) or appropriate WebCape score Students will increase their vocabulary and practice grammar structures closely related to the medical and health administration professions. All language skills are equally emphasized. Highly recommended to students in any of the health-related majors. There will be an intensive on-line component. May not be taken satisfactory/unsatisfactory. It is not open to native speakers. No new enrollments for this course permitted after Friday, February 1st.	3.00	15	TTh 12:00-1:15PM
AS.210.315	01	H		**Spanish for International Relations** *Ramos, Maria Del Rosario* Prerequisites – 210.311 (Advanced Spanish I) or appropriate WebCape score Students will increase their vocabulary and practice grammar structures closely related to judicial services. All language skills are equally emphasized. Highly recommended to students majoring in Law, Business and International Relations. There will be an intensive on-line component. May not be taken satisfactory/unsatisfactory. It is not open to native speakers. No new enrollments for this course permitted after Friday, February 1st.	3.00	15	TTh 10:30-11:45AM
AS.210.316	01	H		**Conversational Spanish** *Ruiz-Perez, Sergio*	3.00	15	TTh 10:30-11:45AM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites 210.311 or appropriate WEB-CAPE score. This course is designed for students who have attained an advanced level of proficiency in Spanish 210.311 and wish to improve their oral skills by focusing on the use of standard, spoken Spanish with an emphasis on colloquial and idiomatic expressions. Students are exposed to a deeper understanding of the cultures of the Spanish-speaking world through movies and other listening comprehension exercises. The course will mainly focus on conversation and vocabulary acquisition. This course is highly recommended for students participating in JHU study abroad programs. It cannot be graded as satisfactory/unsatisfactory. It is not open to native speakers. No new enrollments for this course permitted after Friday, February 1st.			
AS.210.317	01	H	W	**Adv Spanish Composition** *Sanchez, Loreto* Prerequisite: 210.312 or appropriate WebCape score. This third-year course aims at improving the students' reading and writing skills by focusing on various types of texts. Students will also engage in more formal levels of written communication on both literary and non-literary topics. The course also focuses on refinement of grammar. May not be taken satisfactory/unsatisfactory. No new enrollments for this course permitted after Friday, February 1st..	3.00	12	MW 12:00-1:15PM
AS.210.352	01	H	W	**Advanced Italian II** *Staff* Course conducted entirely in Italian. Pre-req: 210.351 or appropriate placement exam scores (Parts I, II, & III) Course presents a systematic introduction to a variety of complex cultural and historical topics related to present-day Italy, emphasizing intercultural comparisons, interdisciplinarity, and encouraging a personal exploration of such topics. Course adopts a continuous assessment system (no mid-term and no final). May not be taken Satisfactory/Unsatisfactory	3.00	15	MWF 10:00-10:50AM
AS.210.362	01	H	W	**Advanced German II: Contemporary Issues in the German Speaking World** *Staff* Taught in German. Topically, this course focuses on contemporary issues such as national identity, multiculturalism and the lingering social consequences of major 20th century historical events. Readings include literary and journalistic texts, as well as radio broadcasts, internet sites, music and film. Emphasis is placed on improving mastery of German grammar, development of self-editing skills and practice in spoken German for academic use. Introduction/Review of advanced grammar. Prereq: 210.361 or equivalent score on placement exam.	3.00	17	MWF 11:00-11:50AM
AS.210.362	02	H	W	**Advanced German II: Contemporary Issues in the German Speaking World**	3.00	17	MW 12:00-1:15PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.210.363	01	H		**Business German** *Wheeler, Heidi L* Prereq: 210.262 Course is designed to familiarize students with the vocabulary and standards for doing business in Germany. Taking a cultural approach, students read texts and engage in discussion that elucidate the works of business, commerce & industry in Germany, the world's third largest economy. Emphasis is placed on vocabulary expansion and writing as it relates to business. Taught in German.	3.00	17	MW 3:00-4:15PM
AS.210.392	01	H	W	**Advanced Portuguese: Language and Literature** *Bensabat Ott, Mary M* This course focuses on reading, writing, and oral expression. Under the supervision of the instructor, students will read several works by major Brazilian, Portuguese, and/or Afro-Portuguese writers, followed by intensive writing and oral discussion on the topics covered. Grammar will be reviewed as necessary. Lab work required. The course is conducted entirely in Portuguese. No satisfactory/unsatisfactory. Pre-requisites: 210.391, or placement test. Instructor permission required.	3.00	15	MWF 9:00-9:50AM
AS.210.405	01	H		**Community Based Learning - Teaching French in Public School** *Guillemard, Claude H* A Community-Based Learning (CBL) language course for upperclass students that: 1) establishes a mutually beneficial relationship between JHU students, a neighboring Elementary School, and their common community; 2) combines academic components (linguistic, pedagogical and social) with the experiential work with the community partner as a way to reinforce learning. Students participate in weekly meetings in French on campus to prepare for their classes and teach twice a week to 2nd, 3rd, or 4th graders at the Elementary school. Prerequisites : Completion of one year of Advanced Writing and Speaking 210.301-302	3.00	10	M 3:00-4:15PM; TTh 1:00-2:45PM
AS.210.411	01	H	W	**Translation for the Professions** *Ramos, Maria Del Rosario* Prerequisites – 210.313, 210.314, or 210.315. Students will be introduced to the basics of translation theory and be presented with the tools needed (specialized dictionaries, web resources, etc) for the translation of literature, business, medical, legal, technological, political, and journalistic texts from Spanish to English and English to Spanish. May not be taken satisfactory/unsatisfactory. No new enrollments for this course permitted after Friday, February 1st.	3.00	12	TTh 12:00-1:15PM
AS.210.412	01	H	W	**Spanish Language Practicum** *Sanchez, Loreto*	3.00	12	W 1:30-3:50PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites – 210.411 The Spanish Language Practicum involves a specially designed project related to student's minor concentration. Provides an opportunity to use Spanish language in real world contexts. May be related to current employment context or developed in agencies or organizations that complement student's research and experimental background while contributing to the improvement of language proficiency. May not be taken satisfactory/unsatisfactory.			
AS.210.417	01	H	W	**Eloquent French** *Cook-Gailloud, Kristin* This highly interactive, writing intensive course places emphasis on : 1) providing students with linguistic tools that will help them reach a high level of written proficiency (advanced lexical, stylistic and idiomatic expressions, linking words used to develop and enrich complex sentences, stylistic and grammatical differences between French and English) 2) enhancing students' analytical skills by introducing them to the French method of Explication de textes 3) teaching students to develop an academic style of writing by studying the different components of the dissertation française (introduction, problématique, argumentation, conclusion, utilisation de sources) 4) teaching students to develop their own style of writing. To that effect, we will study excerpts of French literary texts that deal with themes likely to enhance their own creative writing (lieux imaginaires, mémoire et autobiographie, création d'un personnage de roman, for example) THIS COURSE CAN COUNT AS A 211 (CULTURE) COURSE ONLY FOR THE STUDENTS WHO ALREADY HAVE DECLARED THEIR FRENCH MAJOR AND MINORS BEFORE FALL 2013.	3.00	15	MWF 11:00AM-11:50PM
AS.211.233	01	H		**Freshman Seminar - A History of Reading: from Gutenberg to Kindle** *Staff* Freshmen only. This course investigates the 18th-century revolution in reading – the pedagogical and aesthetic debates about the virtues and dangers of reading, idealizations and critiques of print culture, books as material objects, and the shifting concepts of both author and reader, and to what extent this historical period anticipates our own present day revolution in reading technologies.	3.00	10	TTh 3:00-4:15PM
AS.211.237	01	H		**Literature and Medicine** *Strowick, Elisabeth*	3.00	25	MW 12:00-1:15PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).			
AS.211.253	01	H		**Freshman Seminar: Why is the Fiddler on the Roof?: The Shtetl in Modern Jewish Culture** *Caplan, Beatrice* The most familiar portrayal of the shtetl for an American audience is the setting of the Broadway musical Fiddler on the Roof, where the shtetl, or market town, is a bastion of traditional Jewish life. But what exactly was a shtetl? How did traditional Jews live there, and how were their lives affected by the sweep of modernity? How was the Yiddish language, spoken by all shtetl Jews, both a repository of tradition and an agent of change? How do representations of the shtetl--from corrupt backwater to pious haven--reflect the concerns of Jews from the nineteenth century up to our own day? Through memoir, literature, film and painting, this course will examine actual lives lived in the shtetl, as well as a selection of the many artistic representations of it. All readings will be in English.	3.00	15	TTh 12:00-1:15PM
AS.211.329	01	H	W	**Contemporary Society on Stage: Koltès, Lagarce, Mouawad** *Champy, Flora*	3.00	7	Th 1:30-4:00PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: Advanced Writing and Speaking in French II AS.210.302 This course proposes to examine six plays by three leading figures in contemporary French theater to see how the social changes that occurred in the last three decades are viewed and expressed in the French-speaking world. We will closely read two plays by each author as well as excerpts by these and other major playwrights. Works by Jean-Luc Lagarce (Derniers remords avant l'oubli) and Bernard-Marie Koltès (Combat de nègre et de chiens) will enable us to see how issues such as homosexuality, new family relationships and urban violence deeply transformed French society in the 80s and 90s, while Incendies and Forêts by Wajdi Mouawad will allow us to ask how these issues, along with immigration, decisively shape today's global society. Using literary analysis to reflect upon the contemporary moment and its institutions, the course will incorporate to the extent possible performance recordings and films based on the plays. Course taught in French. Scenes from the plays can be performed at the end of the term.			
AS.211.345	01	H	W	**The Representation of the French Countryside in Contemporary Arts and Literature** *Bel, Auriane* Prereqs: 210.301 and 210.302 Through the analysis of literary texts (Pierre Bergounioux, Pierre Michon), graphic novels (Manu Larcenet), as well as articles and sociological essays (Jeanne Favret-Saada), through movies (Bruno Dumont) and documentaries (Raymond Depardon) and the analysis of contemporary works of art (Didier Marcel, Tixador et Poincheval), we will study how current French artists view the French countryside. We will focus on two generations. The first one, born in the 1940s, witnessed the rural exodus and attempts to retain traces of a lost world. The second one, whose members were born twenty years later, presents rurality as a field of exploration. As such, rurality is depicted either as an utopian, or a disenchanted universe.Both approaches will enable us to consider central issues in contemporary France, such as the notion of terroir and Political Ecology.	3.00	15	M 1:30-4:00PM
AS.211.380	01	H		**Modern Latin American Culture** *Staff* Taught in Spanish. This course will explore the fundamental aspects of Latin- America culture from the formation of independent states through the present—in light of the social, political, and economic histories of the region. The course will offer a general survey of history of Latin- America, and will discuss texts, movies, songs, pictures, and paintings, in relation to their social, political, and cultural contexts. May not be taken satisfactory/unsatisfactory.	3.00	20	TTh 10:30-11:45AM
AS.211.385	01	H		**Documentary Production Practicum: Community Based Learning: Raqs Media Artists in Residence**	3.00	8	Th 1:30-4:00PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Wegenstein, Bernadette This course accompanies the New Delhi based media art collective raqs, consisting of 3 artists, during their first residency in Baltimore during Spring 2013. Students will be helping prepare the media artists' solo exhibition opening at the BMA on February 20, and be involved in a production workshop offered through the JHU Digital Media Center.			
AS.211.394	01	H	W	**Brazilian Cult & Civ** *Bensabat Ott, Mary M* This course is intended as an introduction to the culture and civilization of Brazil. It is designed to provide students with basic information about Brazilian history, art, literature, popular culture, theater, cinema, and music. The course will focus on how indigenous Asian, African, and European cultural influences have interacted to create the new and unique civilization that is Brazil today. The course is taught in English, but ONE extra credit will be given to students who wish to do the course work in Portuguese. Those wishing to do the course work in English for 3 credits should register for section 01. Those wishing to earn 4 credits by doing the course work in Portuguese should register for section 02. The sections will be taught simultaneously. Section 01: 3 credits Section 02: 4 credits (instructor's permission required)	3.00	35	M 2:00-4:20PM
AS.211.394	02	H	W	**Brazilian Cult & Civ**	4.00	20	M 2:00-4:20PM
AS.211.402	01	H		**La France Contemporaine II** *Staff* Students will explore contemporary French society and culture through a wide variety of media: fiction and non-fiction readings (graphic novels, news periodicals, popular magazines), films, music, art, websites and podcasts. A diverse range of hands-on activities in addition to guided readings will help students develop cultural awareness as we discuss topics such as education, politics, humor, sports, cuisine, immigration, slang, and national identity, as well as the historical factors that have influenced these facets of French and francophone culture. Prerequisites: 210.301-302 or 210.301 or permission of instructor.	3.00	15	MWF 9:00-9:50AM
AS.211.402	02	H		**La France Contemporaine II**	3.00	15	TTh 10:30-11:45AM
AS.211.402	03	H		**La France Contemporaine II**	3.00	15	TTh 1:30-2:45PM
AS.211.416	01	H		**Visual Languages in Medical Knowledge** *Wegenstein, Bernadette* This interdisciplinary course, co-taught by professor Veena Das (Anthropology) and Research professor and filmmaker Bernadette Wegenstein (German and Romance Languages and Literatures) will track the mediation of images in the making of medical knowledge and show how sensory knowledge is incorporated or transformed in the process. Co-listed with 214.616 and 070.416	3.00	15	W 3:00-5:30PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.211.430	01	H		**L'Affaire Dreyfus** *Cook-Gailloud, Kristin* This course proposes to look at persuasive strategies that were engaged during the Dreyfus Affair in order to either incriminate or discriminate the Jewish captain falsely accused of having betrayed the French army. Course will focus on the socio-political events that framed the Dreyfus Affair (anti-Semitism in 19th-century France, caricatures and polemical writings in the press, the consequences of the Franco-Prussian War and of the Commune, the bipolar division that split French society into Dreyfusards and anti-Dreyfusards), as well as its long-term effects (the rise of the extreme right, the creation of the "intellectual", the consolidation of Zionism which ultimately led to the creation of a Jewish state). Prerequisites: 210.301-302 or 210.301 or permission of instructor.	3.00	15	MWF 12:00-12:50PM
AS.211.471	01	H	W	**Jules Verne** *Anderson, Wilda* Prereq: 212.334 Introduction to French Literature II An overview of the corpus of the author of the "Voyages extraordinaires". The patron saint of steampunk authors explored through his novels the transformation of the modern world resulting from the explosion of technological advances in the industrial age. Yet he was also an astute and erudite historical thinker, an amateur anthropologist whose work reflected many of the prejudices and challenges of his exploring or colonizing contemporaries, a dabbler in the new human sciences and their relationship to the development of cultural models. A disabused, even pessimistic thinker, he provides a unique entryway into the fin-de-siècle French mind set. Works to be read will include "Cinq semaines en ballon", "Voyage au centre de la terre", "De la terre à la lune", "20,000 lieues sous les mers" and "L'Île mystérieuse", "Le Tour du monde en quatre-vingt jours", "Robur le conquérant" and "Le Maître du monde", "le Sphinx des glaces", "Le Château des Carpathes", and "Paris au XXe siècle". Class will be taught in French. This course can be taken either as a 211 Culture course or 212 Literature course 212.	3.00	10	T 1:30-4:00PM
AS.212.329	01	H	W	**Contemporary Society on Stage: Koltès, Lagarce, Mouawad** *Champy, Flora*	3.00	8	Th 1:30-4:00PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: Advanced Writing and Speaking in French II AS.210.302 This course proposes to examine six plays by three leading figures in contemporary French theater to see how the social changes that occurred in the last three decades are viewed and expressed in the French-speaking world. We will closely read two plays by each author as well as excerpts by these and other major playwrights. Works by Jean-Luc Lagarce (Derniers remords avant l'oubli) and Bernard-Marie Koltès (Combat de nègre et de chiens) will enable us to see how issues such as homosexuality, new family relationships and urban violence deeply transformed French society in the 80s and 90s, while Incendies and Forêts by Wajdi Mouawad will allow us to ask how these issues, along with immigration, decisively shape today's global society. Using literary analysis to reflect upon the contemporary moment and its institutions, the course will incorporate to the extent possible performance recordings and films based on the plays. Course taught in French. Scenes from the plays can be performed at the end of the term.			
AS.212.334	01	H	W	**Introduction à la littérature française II** *Schilling, Derek* Readings and discussion of texts of various genres from the Middle Ages to the 20th century. The two semesters may be taken in either order. This sequence is a prerequisite to all further literature courses. Students may co-register with an upper-level course during their second semester. Prerequisites: both semesters of 210.301-302 or at least one semester of 210.301-302 with a grade of A and written permission of the instructor. Please note that Intro to French Literature I and II (AS.212.333 and AS.212.334) are prerequisites for French Literature courses (dept. 212) at the 300 level and above. These two courses count as advanced courses and carry both university and major credit.	3.00	20	TTh 12:00-1:15PM
AS.212.334	02	H	W	**Introduction à la littérature française II** *Russo, Elena*	3.00	20	MW 12:00-1:15PM
AS.212.343	01	H	W	**Literature and Science in France 1750-1880** *Roman, Hanna Andrea* Prereqs: 210.301 and 210.302 and 212.333 or 212.334. This course will investigate changes in the meaning and function of the literature of science and of the natural world during the period 1750-1850 (N.B. All course readings, assignments, and discussions will be conducted in French). Dean's Teaching Fellowship	3.00	15	TTh 12:00-1:15PM
AS.212.400	01	H	W	**Flaubert's L'Éducation sentimentale, a Prose Novel for Modern Time** *Neefs, Jacky G*	3.00	3	T 1:30-4:00PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Undergrads need instructor permission. Through a close reading of Flaubert's novel, selective consideration of the drafts and of the historical, political and artistic context, we shall examine the making of that masterpiece of narrative prose, which Flaubert himself conceived under the sign of modernity. Our central concern, in other words, is with L' Éducation sentimentale as a second crucial event in aesthetic modernity, twenty two years after Madame Bovary. Seminar will be taught in French and English. L'Education sentimentale edition required: GF Flammarion, 2003.			
AS.212.429	01	H		**Thesis Prep** *Staff* This course will meet three times during the Fall semester to enable all French majors to prepare their thesis subject, thesis bibliography and abstract prior to the writing of the Senior Thesis (AS 212.430) in the Spring semester of their senior year. This course is required of all French majors and must be taken during the Fall semester of their senior year. Prerequisites: 212.333-334 and either prior enrollment or concurrent enrollment in AS.210.417 Eloquent French Schedule TBA upon consultation with the class list, as there are only three group meetings. The rest of the meetings are in individual appointments with the DUS or another chosen French professor.	1.00	15	TBA
AS.212.430	01	H	W	**Senior Seminar** *Neefs, Jacky G* An in-depth and closely supervised initiation to research and thinking, oral and written expression, which leads to the composition of a senior thesis in French.	3.00	15	W 1:30-4:00PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.212.471	01	H	W	**Jules Verne** *Anderson, Wilda* Prereq: 212.334 Introduction to French Literature II An overview of the corpus of the author of the "Voyages extraordinaires". The patron saint of steampunk authors explored through his novels the transformation of the modern world resulting from the explosion of technological advances in the industrial age. Yet he was also an astute and erudite historical thinker, an amateur anthropologist whose work reflected many of the prejudices and challenges of his exploring or colonizing contemporaries, a dabbler in the new human sciences and their relationship to the development of cultural models. A disabused, even pessimistic thinker, he provides a unique entryway into the fin-de-siècle French mind set. Works to be read will include "Cinq semaines en ballon", "Voyage au centre de la terre", "De la terre à la lune", "20,000 lieues sous les mers" and "L'Île mystérieuse", "Le Tour du monde en quatre-vingt jours", "Robur le conquérant" and "Le Maître du monde", "le Sphinx des glaces", "Le Château des Carpathes", and "Paris au XXe siècle". Class will be taught in French. This course can either be taken as a 211 Culture course or a 212 Literature course.	3.00	10	T 1:30-4:00PM
AS.213.233	01	H		**Freshman Seminar - A History of Reading: from Gutenberg to Kindle** *Staff* Freshmen only. This course investigates the 18th-century revolution in reading – the pedagogical and aesthetic debates about the virtues and dangers of reading, idealizations and critiques of print culture, books as material objects, and the shifting concepts of both author and reader, and to what extent this historical period anticipates our own present day revolution in reading technologies.	3.00	10	TTh 3:00-4:15PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.213.237	01	H		**Literature and Medicine** *Strowick, Elisabeth* Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).	3.00	25	MW 12:00-1:15PM
AS.213.308	01	H		**Gespenster: verschwiegen und doch weitergegeben** *Pahl, Katrin* Prereq: 210.361 Reading and discussion in German. We will study the psychic afterlives of WWI, Nazism, and Stasi experiences and involvements. These are stories that are often not told in the family but nevertheless handed down across generations in powerful, less-than-explicit, and often distorted ways. Drawing on philosophy and psychoanalysis, we will discuss how the need for silence meets the need to talk and to hear. We will read literature and analyze films on the family lives of former political prisoners in the GDR, Stasi informants, Nazi perpetrators, victims of the Holocaust, and soldiers of the First World War.	3.00	12	TTh 12:00-1:15PM
AS.213.332	01	H	W	**Zionism in Modern Literature: Jewish or Israeli?** *Caplan, Marc*	3.00	50	MW 12:00-1:15PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course will be an examination of the themes of nationalism, Zionism, and the problems of the nation-state in modern Jewish literature of the past hundred years. Among the topics we will consider are the unique challenges of a diasporic culture relocating its national aspirations to an unfamiliar and often hostile environment, the controversies surrounding political nationalism within modern Jewish culture, the competition between languages in the formation of Israeli society, the character of Israeli national culture, the relationship of Israel's Jewish majority with its minority population, and the relationship of Israeli culture to the Jewish culture of the diaspora. To what extent does Israeli literature constitute a continuation of themes and techniques found in previous Jewish writing, and to what extent does it represent a new beginning? To what extent can Israeli literature be compared with other varieties of Jewish writing and to what extent is this writing a unique cultural phenomenon? Although the majority of works discussed will be translated from Hebrew—including such leading figures of Israeli literature as S. Y. Agnon, S. Yizhar, Amos Oz, and Orly Castel-Bloom—we will also be considering works translated from Yiddish (Mendele Moykher-Sforim), German (Theodor Herzl), and Arabic (Emile Habiby), as well as contemporary American writers such as Philip Roth and Michael Chabon. All readings and discussions conducted in English. Cross-listed with Jewish Studies, English, and the Humanities Center			
AS.213.356	01	H		**Goethe** *Krauss, Andrea B* Prereq: 210.362. Taught in German. This seminar offers an introduction to the work of Goethe (1749-1832) who is one of the most prominent figures in the history of German literature and thought and according to T.S. Eliot 'one of the wisest of men'. Tracing this wisdom through selected poems, prose, plays and essays, we will closely analyze the fascinating complexity of an oeuvre that reflects Goethe's interdisciplinary interests in the aesthetic, philosophical, and scientific discourses and controversies of his time. Readings will include: Prometheus, Goetz von Berlichingen, Faust I, The Sorrows of Young Werther, Iphigenia in Tauris, Novella, Metamorphosis of Plants, Theory of Colours etc.	3.00	15	MW 1:30-2:45PM
AS.213.368	01	H		**German Political Thought** *Tobias, Rochelle* This course will introduce students to major figures in German political thought from Martin Luther to Karl Marx and Immanuel Kant to Carl Schmitt. The class will explore such issues as the notion of sovereignty, the relationship between church and state, the theory of parliamentary democracy, and the political and economic ramifications of liberalism. Reading and discussion in English.	3.00	25	TTh 10:30-11:45AM
AS.214.301	01	H	W	**Survey of Italian Literature**	3.00	15	TTh 12:00-1:15PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Staff Taught entirely in Italian. An overview of the key texts, authors, and movements in the Italian literary tradition, from the Middle Ages to the present. Recommended for all Italian majors and minors, and for Romance Languages majors who include Italian. Completion of Italian 210.252 Intermediate recommended; the Survey of Italian Literature may be taken concurrently with Advanced Italian 210.352.			
AS.214.317	01	H		**Italian Theater from Commedia dell'arte to Dario Fo** *Coleman, James* Students must have completed Intermediate Italian II (210.252) or equivalent. Italian writers and performers have created some of the world's greatest theatrical works, particularly in the genres of comedy and opera. We will study the evolution of Italian theater from the improvisatory humor of the Commedia dell'arte, through the invention and development of Italian opera, to the zany and politically engaged satire of Dario Fo, winner of the 1997 Nobel Prize in Literature. Other major authors we will study include Carlo Goldoni and Luigi Pirandello. We will view film versions and live performances of plays and operas in Italian. The class will be conducted in Italian.	3.00	15	TTh 1:30-2:45PM
AS.214.367	01	H	W	**Masterpieces of Italian Poetry** *Forni, Pier Massimo* The goal of this course is to acquaint the students with themes and images recurring in the Italian poetic tradition from the Middle Ages to the Novecento.	3.00	15	M 1:30-4:00PM
AS.214.370	01	H	W	**Magic and Marvel of the Renaissance** *Stephens, Walter E* Magic and Marvels or Wonders make us question what we see and experience: what is reality, what is illusion; what's natural and what's supernatural? What's human and what's more, or less, than human? During the Renaissance, ideas about the magical and the marvelous were bound up with questions and issues very different from those of our time. With the exact sciences still to be invented, the nature of the world was much less hard and fast for Renaissance people than it is for the modern educated person. The literary masterpieces of the Italian Renaissance, especially the romance and the theater, provide vivid illustrations of the early modern sense of wonder. Foremost among these are the theatrical comedies which Italian authors revived in imitation of the ancients, and the romances, especially Ariosto's Orlando furioso (1532) and Tasso's Gerusalemme liberata (1581). These works influenced ideas about magical and marvelous phenomena across Europe for centuries to come. Works will be read and discussed in English. Italian majors will attend a weekly supplemental discussion in Italian and compose their written work in Italian.	3.00	20	T 3:00-5:15PM
AS.215.231	01	H	W	**Introduction to Literature in Spanish** *Staff*	3.00	15	TTh 12:00-1:15PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				The main objective of this course is to examine and discuss specific authors and topics in literature in Spanish from the Middle Ages to the 20th century. The course is designed to cover a selection of Hispanic texts from Spain and Latin America. Literary genres to be studied will include narratives, poetry and drama. The bulk of each class session will be dedicated to the discussion of the assigned readings. This course is taught in Spanish. This course is required for the major in Spanish. Course coordinator: Eduardo Gonzalez			
AS.215.311	01	H		**Radicalism, Film & Literature in Modern Latin America** *Strayer, Michael Mclachlan* This course will explore the cultural symbiosis of radical politics, film, and literature in modem Latin America. Beginning with Cuban revolutionary Jose Marti and the definitive end of the Spanish Empire and concluding with current socialist movements in South America, we will analyze key radical texts by the likes of Friedrich Engels and Ernesto "Che" Guevara, classic films like The Battle of Chile by Patricio Guzman, and important works of literature by authors such as Pablo Neruda and Rigoberta Menchu. Note: Class will be conducted in English and all assigned texts will also be in English in order to encourage interdisciplinary enrollment and participation.	3.00	25	TTh 4:30-5:45PM
AS.215.327	01	H	W	**Modern Political Thought in Latin America** *Castro-Klaren, Sara* Juniors and Seniors only. The course is an introduction to modern political tough in Latin America. It draws on essays and novels written by major and influential political thinkers such as D.F. Sarmiento, Gonzalez Prada, J.C. Mariategui, Leopoldo Zea, J. E. Rodo, Octavio Paz, Jose Revueltas, Jose Maria Arguedas, Mario Vargas Llosa, Darcy Ribeiro, Enrique Dusssel and the authors of the Sumac Kawsay as well as Liberation Theology central writings. The course will be taught in English. Students wishing to do work in the original Spanish or Portuguese will be encouraged to do so.	3.00	25	W 1:30-4:00PM
AS.215.336	01	H		**Don Quijote** *Sieber, Harry* A close reading and discussion primarily in Spanish of Cervantes' masterpiece, with concentration on its major themes and contributions to the formation of the modern novel. Prereq: 210.311 or 210.312	3.00	12	T 4:00-6:30PM
AS.215.402	01	H	W	**Senior Seminar: Literaturas y culturas del Cono Sur: Argentina, Uruguay y Chile** *Gonzalez, Eduardo*	3.00	30	Th 1:30-4:00PM

German & Romance Languages & Literatures

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Advanced Spanish and reading proficiency. Estudio de las culturas literarias de Argentina, Uruguay y Chile en sus respectivos contextos sociales y políticos desde la conquista española. Las culturas indígenas, el desarrollo de la nación, las culturas populares, culturas inmigrantes, regímenes políticos, actualidad económica y social en la época de la globalización.			
AS.361.316	01	HS		**Caribbean Writing in Shakespeare, V. S. Naipaul, and Alejo Carpentier** *Gonzalez, Eduardo* Readings and polemics concerned with Shakespeare´s play The Tempest (1610-1611) and its postcolonial afterlives; V. S. Naipaul´s novel A House for Mr. Biswas (1961); and Alejo Carpentier´s El siglo de las luces (1962). The socio historical and political contexts of each work and authorship will be considered in depth in terms of dominant notions of writing in current critical theory. Cross-listed with GRLL, English, and Writing Seminars.	3.00	20	M 1:30-3:50PM

History

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.061.397	01	H		**French Masculinities** *Mason, Laura* Examines changing ideals of masculinity in France after 1960 as they found expression on film, rooting the work of iconic stars and directors in their cultural, political and historical contexts.	3.00	18	Th 1:30-3:50PM; W 4:30-7:00PM
AS.100.104	01	HS		**Occ Civ: Modern Europe** *Moss, Kenneth* European history since the French Revolution. Topics include: revolutions and democratization, industrialization, nationalism, imperialism, two World Wars, fascism, decolonization, Soviet communism, and formation of the European Union.	3.00	20	MW 11:00AM-12:00PM; F 11:00AM-12:00PM
AS.100.104	02	HS		**Occ Civ: Modern Europe**	3.00	20	F 11:00AM-12:00PM; MW 11:00AM-12:00PM
AS.100.104	03	HS		**Occ Civ: Modern Europe**	3.00	20	F 11:00AM-12:00PM; MW 11:00AM-12:00PM
AS.100.104	04	HS		**Occ Civ: Modern Europe**	3.00	20	F 12:00-1:00PM; MW 11:00AM-12:00PM
AS.100.104	05	HS		**Occ Civ: Modern Europe**	3.00	20	F 12:00-12:50PM; MW 11:00AM-12:00PM
AS.100.104	06	HS		**Occ Civ: Modern Europe**	3.00	20	F 10:00-11:00AM; MW 11:00AM-12:00PM
AS.100.110	01	HS		**Making America: Politics and Society since the Great Depression** *Burgin, Angus* This course explores the interplay between economic growth and instability, diversity and conformity, war and protest, and liberalism and conservatism in modern American politics and society. NOTE: Previously offered as 100.182, “The United States since 1929.”	3.00	20	MWF 11:00-11:50AM
AS.100.110	02	HS		**Making America: Politics and Society since the Great Depression**	3.00	20	MWF 11:00-11:50AM
AS.100.110	03	HS		**Making America: Politics and Society since the Great Depression**	3.00	20	MW 11:00-11:50AM; F 10:00-10:50AM
AS.100.110	04	HS		**Making America: Politics and Society since the Great Depression**	3.00	20	MW 11:00-11:50AM; F 10:00-10:50AM
AS.100.128	01	HS		**Ancient and Medieval Jewish History** *Rustow, Marina* History of the Jews under empires and monarchies, from the Persian restoration to the Spanish expulsion. Emphasis on Jews in the Middle East and how the rise of Christianity and Islam challenged, transformed and strengthened Judaism.	3.00	20	MWF 10:00-10:50AM
AS.100.128	02	HS		**Ancient and Medieval Jewish History**	3.00	20	MWF 10:00-10:50AM
AS.100.136	01	HS	W	**Abraham Lincoln and His America** *Johnson, Michael P* Freshmen seminar that explores the life and times of Abraham Lincoln though contemporary sources and texts by historians.	3.00	15	Th 1:30-3:50PM
AS.100.194	01	HS	W	**Undergrad Sem in History** *Ryan, Mary*	3.00	20	M 1:30-3:50PM

History

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 100.193 Dept. majors only, year long course, must be taken in both semesters Required for all History majors and normally taken during the sophomore year. Deals with the elements of historical thinking and writing. Must be taken in sequence.			
AS.100.194	02	HS	W	**Undergrad Sem in History** *Shepard, Todd*	3.00	20	M 1:30-3:50PM
AS.100.262	01	HS		**History, Politics and Identity in Russia from Stalin to Putin** *Koposov, Nikolay* The course explores political uses of the past and attempts to define “Russianness” in the context of the projects of Communism and liberal democracy respectively in Soviet and post-Soviet Russia.	3.00	40	TTh 10:30-11:45AM
AS.100.310	01	HS		**The French Revolution** *Mason, Laura* Political, social and cultural history of one of the great turning-points in European history. Previously offered as AS.100.204.	3.00	18	TTh 4:30-5:45PM
AS.100.312	01	HS	W	**Emancipations** *Ewing, Adam* Comparative exploration of black emancipation and freedom struggles, including slave rebellions in the Caribbean and United States, global civil rights and black power, African nationalism, and the end of apartheid.	3.00	15	W 2:30-5:00PM
AS.100.314	01	HS	W	**The Enlightenment** *Kwass, Michael* Examines the ideas and social context of the Enlightenment, an intellectual movement that swept Europe in the 18th century.	3.00		MW 1:30-3:00PM
AS.100.317	01	HS	W	**Jewish Music** *Walden, Joshua S* What is “Jewish music,” and what roles has it played in global and Jewish cultures? This course will address these questions, considering genres and contexts of Jewish music from cantillation to klezmer and from art music to Yiddish cinema. Cross listed with Jewish Studies	3.00	20	Th 2:00-4:30PM
AS.100.319	01	HS		**The Tudors: Reforming England 1485-1603** *Walker, Jessica Brooke* This course will examine Tudor England, including the reigns of Henry VIII, Edward VI, Mary I, and Elizabeth I, and the intellectual and cultural movements of the Reformation and the Renaissance.	3.00	15	TTh 3:00-4:15PM
AS.100.320	01		W	**Writing U.S. Empire** *Connolly, Nathan D* This team-taught course explores how to think and write about U.S. engagements with the wider world during the nineteenth and early twentieth centuries.	3.00	15	MW 1:30-2:45PM
AS.100.326	01	HS		**Extreme America: Political Extremism, 1787-1920** *Walters, Ronald*	3.00	18	T 1:30-3:50PM

History

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				In the half century between 1870 and 1920, socialism, anarchism, and communism were real presences in American life, not just smear words. This course will examine political extremism in this extraordinary period with an eye toward understanding the causes and consequences of a political culture of extremism.			
AS.100.339	01	HS	W	**Tolstoy/Chagall/Pasternak: Russia's Age of Genius** *Brooks, Jeffrey P* Topic is history, literature, and art in Russia's age of genius, 1850s through the 1920s. Requirements are short papers and 2 quizzes. Format is short lecture plus discussion.	3.00	20	M 1:30-3:50PM
AS.100.348	01	HS	W	**20th-Century China** *Rowe, William T* Cross listed with East Asian Studies	3.00	75	TTh 10:30-11:45AM
AS.100.365	01	HS	W	**Culture & Society in the High Middle Ages** *Spiegel, Gabrielle M* This course will cover the history of Medieval Europe in the High Middle Ages. It will investigate growth of feudalism, the revival of commerce, the growth of national kingdoms, and the intellectual revival known as the Renaissance of the 12th century, including the birth of courtly literature and the emergence of scholasticism.	3.00	20	MWF 11:00-11:50AM
AS.100.395	01	HS	W	**A Cultural History of Contemporary China** *Ren, Ke* This course examines cultural and intellectual changes in post-Mao China through developments in literature, film, art, music, and the media, with attention to both domestic transformations and global contexts.	3.00	25	TTh 3:00-4:15PM
AS.100.406	01	HS	W	**American Business in the Age of the Modern Corporation** *Galambos, Louis P* This course will focus on business organizations, their performance, and sociopolitical relations in the 20th century.	3.00	25	T 1:30-3:50PM
AS.100.412	01	HS	W	**Jewish History in British Mandatory Palestine 1917-1947** *Moss, Kenneth* Comparative exploration of black emancipation and freedom struggles, including slave rebellions in the Caribbean and United States, global civil rights and black power, African nationalism, and the end of apartheid.	3.00	15	W 1:30-4:00PM
AS.100.424	01	HS	W	**Women & Modern Chinese History** *Meyer-Fong, Tobie* This course examines the experience of Chinese women, and also how writers, scholars, and politicians (often male, sometimes foreign) have represented women's experiences for their own political and social agendas. Cross listed with East Asian Studies.	3.00	20	T 1:30-3:30PM

History

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.100.426	01	HS	W	**Popular Culture in Early Modern Europe** *Marshall, John W* Witchcraft, magic, carnivals, riots, folk tales, gender roles; fertility cults and violence especially in Britain, Germany, France, and Italy.	3.00	25	TTh 10:30-11:45AM
AS.100.433	01	HS	W	**Censorship in Europe and the U.S.** *Jelavich, Peter* This undergraduate research seminar will examine censorship policies and debates from the eighteenth century to the present. In addition to discussion of common readings, each student will choose a censorship case to research and present to the class.	3.00	20	W 1:30-4:00PM
AS.100.440	01	HS	W	**The Revolutionary Experience in Latin America** *Knight, Franklin* Comparative examinations of revolutionary political changes in Haiti, Mexico, Bolivia, and Cuba. Cross-listed with Latin American Studies	3.00	20	TTh 10:30AM-12:00PM
AS.100.445	01	HS	W	**African Fiction as History** *Larson, Pier M* An exploration of Modern African history through the African historical novel.	3.00	20	M 2:00-4:30PM
AS.100.482	01	HS		**Historiography Mod China** *Rowe, William T*	3.00	12	W 1:30-4:00PM
AS.100.498	01	HS	W	**Hist-Family & Gender-Us** *Ditz, Toby L* Topics include: history of emotions; politics of sexuality and marriage; impact of race, ethnicity, and class on family life; women and gender inequality. Primarily colonial era through the early twentieth century, with some attention to contemporary politics of family, gender, and sexuality.	3.00	18	MW 12:00-1:15PM
AS.130.352	01	H		**History of Hasidism** *Katz, David* Although it appears to be a relic of pre-modern Judaism, Hasidism is a phenomenon of the modern era of Jewish history. This course surveys the political and social history of the Hasidic movement over the course of the last three centuries. Students will also explore basic features of Hasidic culture and thought in their historical development. Cross-listed with Jewish Studies	3.00	40	TTh 9:00-10:15AM
AS.140.425	01	HS		**Individualized Medicine from Antiquity to the Genome Age** *Comfort, Nathaniel* Prereqs: 140.105, 140.106 A seminar for graduate students and advanced undergraduates. We will explore the notion of the individual in medicine over 25 centuries, from the Hippocratics to the invention of the case study during the Renaissance to the genetic, biochemical, and immunological individual in recent biomedicine. Cross-listed with Anthropology and History.	3.00	12	M 3:00-5:20PM
AS.211.253	01	H		**Freshman Seminar: Why is the Fiddler on the Roof?: The Shtetl in Modern Jewish Culture** *Caplan, Beatrice*	3.00	15	TTh 12:00-1:15PM

History

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				The most familiar portrayal of the shtetl for an American audience is the setting of the Broadway musical Fiddler on the Roof, where the shtetl, or market town, is a bastion of traditional Jewish life. But what exactly was a shtetl? How did traditional Jews live there, and how were their lives affected by the sweep of modernity? How was the Yiddish language, spoken by all shtetl Jews, both a repository of tradition and an agent of change? How do representations of the shtetl--from corrupt backwater to pious haven--reflect the concerns of Jews from the nineteenth century up to our own day? Through memoir, literature, film and painting, this course will examine actual lives lived in the shtetl, as well as a selection of the many artistic representations of it. All readings will be in English.			
AS.211.394	01	H	W	**Brazilian Cult & Civ** *Bensabat Ott, Mary M* This course is intended as an introduction to the culture and civilization of Brazil. It is designed to provide students with basic information about Brazilian history, art, literature, popular culture, theater, cinema, and music. The course will focus on how indigenous Asian, African, and European cultural influences have interacted to create the new and unique civilization that is Brazil today. The course is taught in English, but ONE extra credit will be given to students who wish to do the course work in Portuguese. Those wishing to do the course work in English for 3 credits should register for section 01. Those wishing to earn 4 credits by doing the course work in Portuguese should register for section 02. The sections will be taught simultaneously. Section 01: 3 credits Section 02: 4 credits (instructor's permission required)	3.00	35	M 2:00-4:20PM
AS.211.394	02	H	W	**Brazilian Cult & Civ**	4.00	20	M 2:00-4:20PM
AS.213.368	01	H		**German Political Thought** *Tobias, Rochelle* This course will introduce students to major figures in German political thought from Martin Luther to Karl Marx and Immanuel Kant to Carl Schmitt. The class will explore such issues as the notion of sovereignty, the relationship between church and state, the theory of parliamentary democracy, and the political and economic ramifications of liberalism. Reading and discussion in English.	3.00	25	TTh 10:30-11:45AM
AS.362.175	01	HS	W	**Black Power Movement** *Hayes, Floyd, III.* This course critically examines trends, developments, contradictions, and dilemmas related to the Black Power Movement for black identity and self-determination in the late 1960s and 1970s.	3.00	15	TTh 1:30-2:45PM
AS.362.204	01	H	W	**Women in African History** *Romero, Patricia*	3.00	15	Th 2:00-4:30PM

History

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Selected readings written by or about notable African women from the 17th century to the present. Themes explored include slavery, power and religion, economics, health and politics.			
AS.362.206	01	HS	W	**Research Seminar: Baltimore History from the AFRO Newspaper Archives** *Hinderer, Moira* This small, project-oriented class will introduce you to methods in historical research while exploring major topics in twentieth century Baltimore history. We will use the rich reporting of Baltimore's Afro-American Newspapers, to explore Baltimore's place in the larger history of Black urban experience. Students will analyze images and exhibits related to African-American history, as well as research and curate small online exhibits of primary source materials including photographs, newspaper clippings, correspondence, pamphlets, flyers, and maps. We will be among the first scholars to work in the Afro's rich archival collections, which include over a million images.	3.00	10	W 1:30-3:50PM
AS.389.275	01	HS		**Interpreting Collections: An Introduction to Museum Education** *Staff* Part public history, part introduction to museum practices, this hands-on course invites students into a local collection to develop interpretive materials for diverse audiences. Students consider the issues and ideas that inform object-based learning and learn about the history, theory and practice of museum education. Course culminates in the creation of interpretive text for the Baltimore Museum of Industry. M&S practicum course.	3.00	12	T 1:30-3:50PM

History of Art

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.102	01	H		**Intro: Hist Euro Art II** *Merback, Mitchell* Prereq: AS.010.101 is required or by permission of the instructor - A survey of painting, sculpture, and architecture from the Renaissance to the present.	4.00	25	F 10:00-10:50AM; MW 12:00-1:15PM
AS.010.102	02	H		**Intro: Hist Euro Art II**	4.00	25	F 11:00-11:50AM; MW 12:00-1:15PM
AS.010.102	03	H		**Intro: Hist Euro Art II**	4.00	25	MW 12:00-1:15PM; F 12:00-12:50PM
AS.010.102	04	H		**Intro: Hist Euro Art II**	4.00	25	F 12:00-12:50PM; MW 12:00-1:15PM
AS.010.251	01	H		**Medieval Spaces: Site, Image, and Viewer in the Middle** *Lakey, Christopher* This lecture course serves as an introduction to medieval art by analyzing the formal relationships between architecture and images at holy sites from, roughly, the 4th century through the 14th. The course will focus primarily on how those relationships structured viewers' experiences of the divine by understanding how works functioned for specific audiences in a particular spatial context. In reviewing the origins and transformations of Christian visual culture we will investigate how site-specific image production in Western Europe and Byzantium informed social and political relations; how theological problems related to image worship affected the form and content of the visual arts; and how developments in public and private devotion altered the spaces for imagistic display. Along the way we will encounter a wide array of geographical sites and histories, including early Christian examples in Rome and Byzantium (e.g. the Roman catacombs and Hagia Sophia), monastic settlements in France and Germany during the 8th and 9th centuries (e.g., St. Gall), 12th century architectural sculpture along the European pilgrimage routes, French and German Gothic cathedrals, and monumental painting cycles in Italy (e.g. the Arena Chapel in Padua). By undertaking close readings of a site and its images, we will discover how architectonics encouraged viewers to spatially interact with images. Readings will include both primary and secondary sources, and we will investigate a variety of methods and approaches to the interpretation of art objects.	3.00	25	TTh 10:30-11:45AM
AS.010.256	01	H		**Nineteenth-Century European Art** *Melius, Jeremy* A selective survey of European painting and sculpture from the French Revolution to the start of the First World War. The nineteenth century ushered in an era which saw political instability, industrialization, imperialism, and the growth of popular culture come to bear on the very conditions of art-making. Focusing on key moments in this history, the course aims to recover the real intensity and strangeness of art's involvement with modernity. Topics include neo-classicism; art and revolution; the rise of landscape; the triumph of the bourgeoisie; the gendering of art; and the birth of the avant-garde.	3.00	25	TTh 12:00-1:15PM
AS.010.263	01	H		**Paris / New York After the War**	3.00	25	MW 4:30-5:45PM

History of Art

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Watson, Jennifer Lynn This course introduces the developments in art after World War II, in both Paris and New York, and studies how certain sensibilities overlapped and intersected as the two cities vied to be the international center of modern art. Prereqs. AS.010.102			
AS.010.309	01	H		**Gifts and Thefts in the Middle Ages** *Danford, Rachel Elizabeth* Why were some medieval objects valued as gifts, others appropriated as spolia, and still others taken by force? How does transferring objects from one cultural context into another change their meaning? Western, Byzantine, and Islamic art, 6th-13th centuries.	3.00	25	MW 12:00-1:15PM
AS.010.327	01	H	W	**The Harem and the Veil: Space and Gender in the Islamic World** *Brown, Rebecca Mary* This course explores the constructed imagery of the harem and the veil in relation to politics and visual culture in the Middle East, North Africa, India, and Euro-America. Topics will include: Ottoman palace architecture, Orientalist painting, mandating/banning the veil, Islamic feminisms. We will address visual culture broadly, including advertising, architecture, contemporary art, film, news media.	3.00	15	T 3:00-5:30PM
AS.010.333	01	H		**The Making of Renaissance Rome 1300-1600** *Campbell, Stephen* The multiple identities of the ancient city as these are understood and represented through the work of artists such as Giotto, Filarete, Raphael, Bramante, and Caravaggio; the writings of Petrarch, Pius II, Alberti, and Montaigne; the statecraft and patronage of the Renaissance popes	3.00	25	TTh 1:30-2:45PM
AS.010.366	01	H	W	**Native American Art** *Deleonardis, Lisa* Survey of the principle visual arts of North America (1500 BC - AD 1600). Introduction to interpretive theory and methodology. Collections study in local and regional museums. Cross-listed with Programs in Museums and Society, Archaeology, and PLAS.	3.00	25	TTh 10:30-11:45AM
AS.010.398	01	H	W	**Tombs for the Living** *Deleonardis, Lisa* Centering on the tomb as a unit of analysis, this course examines how death and funerary ritual reflect the cultural values of the living and are an active force in shaping them. Drawing on case studies from Mesoamerica and the Andes we consider various approaches to entombment and funerary ritual.	3.00	25	TTh 3:00-4:45PM
AS.010.424	01	H		**Collecting Roman Art: From Antiquity to Present** *Tucci, Pier Luigi* A survey of the most important collections of Greek and Roman sculpture, from the late-Republican age through the Middle Ages and the Renaissance, until the creation of the main museums in Europe and in the United States.	3.00	25	TTh 4:30-5:45PM

History of Art

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.468	01	H		**Sculpture After Sculpture** *Meyer, James* A survey of major theories of sculpture fom the mid-Twentieth Century to the present day. Through close readings of critical texts, we will consider the following nexes of debate: late modernism; minimalism; land art and the alleged dispersion of sculpture as an autonomous medium; site-specific and mobile site sculpture; giganticist sculpture; and the resurgence of a conventional sculpture of bodily proportion during the last fifteen years after sculpture as a medium was declared obsolete: a sculpture “after” sculpture. Readings: Writings by Henry Moore, Herbert Read, Clement Greenberg, Michael Fried, Donald Judd, Robert Morris, Robert Smithson, Rosalind Krauss, Yve-Alain Bois, Douglas Crimp, Hal Foster, Alex Potts, Miwon Kwon, and George Baker.	3.00	8	Th 4:00-6:30PM
AS.040.119	01	H		**The World of Pompeii** *Valladares, Herica* This course will focus on the history and archaeology of Pompeii. Close attention will also be paid to the reception of Pompeian materials in European and American culture. Cross-listed with History of Art and the Program in Museums and Society.	3.00	25	MW 12:00-12:50PM; F 12:00-12:50PM
AS.040.119	02	H		**The World of Pompeii**	3.00	25	MW 12:00-12:50PM; F 1:30-2:20PM
AS.389.130	01	H		**Mini Course: Conservation, An Introduction to Technical Art History** *Staff* Look through the eyes of a conservator and learn how to answer historical questions by analyzing the physical nature of works of art. Objects examined will include paintings, sculpture and works on paper from the collection of the Baltimore Museum of Art. Class meets 4 times, on February 7, 14, 21 and 28, at the BMA. Syllabus and organizational meeting at JHU on Thursday, January 31, 5:30pm. Department permission required.	1.00	7	Th 3:00-5:20PM
AS.389.320	01	HS		**Photographs on the Edge: Ara Güler in Archives of the Smithsonian's Freer and Sackler Galleries** *Staff* Work as a curator alongside Smithsonian staff, researching the work of Turkish photographer Ara Güler to develop an exhibit that considers relationships between the history of photography, archives and the museum. Class will travel several times to the Freer and Sackler Galleries in Washington D.C. M&S practicum course.	3.00	12	W 3:00-5:20PM

History of Science & Technology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.140.106	01	HS		**History of Modern Medicine** *Greene, Jeremy* This course examines medical ideas, practices, and structures in their historical context and social setting, in Europe and the United States, from the 18th century to the present. Cross-listed with Public Health Studies	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	02	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	03	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	04	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	05	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.302	01	HS		**Rise of Modern Science** *Kingsland, Sharon E* Survey of major scientific advances from 18th to 20th century, from Newtonian science to the age of Big Science.	3.00	15	MW 9:00-9:50AM; F 9:00-9:50AM
AS.140.302	02	HS		**Rise of Modern Science**	3.00	15	MW 9:00-9:50AM; F 9:00-9:50AM
AS.140.302	03	HS		**Rise of Modern Science**	3.00	15	MW 9:00-9:50AM; F 9:00-9:50AM
AS.140.339	31			**JHU Oxford: History & Philosophy of Sciences** *Schildbach, Joel F* Open to JHU Oxford participants only.	3.00	6	TBA
AS.140.352	01	HS		**Who Wants to be a Billionaire?: High Tech & the American University** *Morris, Susan W* Long before Facebook, faculty and students were creating startups on campus. This course examines college entrepreneurship from its 19th-century origins to today: the potential perils, profits, and promise for entrepreneurs and universities alike.	3.00	18	TTh 10:30-11:45AM
AS.140.362	01	HS		**The Communications Revolution** *Morris, Susan W* Investigates the nature and impact of phenomenal changes in transportation and communication since the 19th-century, including iconic developments such as the Panama Canal, Brooklyn Bridge, airplanes, automobiles, television, wireless communication and the internet.	3.00	35	TTh 1:30-2:45PM
AS.140.368	01	HS		**Technological Transformations** *Portuondo, Maria M* Course explores the historical development of revolutionary technologies and their transformations of the individual and society. Focus on computing, biotech, consumer goods, warfare, manufacturing, agriculture, imaging, energy, transportation, and sustainability.	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.368	02	HS		**Technological Transformations**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.368	03	HS		**Technological Transformations**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.368	04	HS		**Technological Transformations**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.412	01	HS	W	**Research Seminar** *Portuondo, Maria M* Departmental Majors Writing a Senior Thesis Only	2.00	10	TBA

History of Science & Technology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.140.425	01	HS		**Individualized Medicine from Antiquity to the Genome Age** *Comfort, Nathaniel* Prereqs: 140.105, 140.106 A seminar for graduate students and advanced undergraduates. We will explore the notion of the individual in medicine over 25 centuries, from the Hippocratics to the invention of the case study during the Renaissance to the genetic, biochemical, and immunological individual in recent biomedicine. Cross-listed with Anthropology and History.	3.00	12	M 3:00-5:20PM
AS.211.237	01	H		**Literature and Medicine** *Strowick, Elisabeth* Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).	3.00	25	MW 12:00-1:15PM
AS.213.237	01	H		**Literature and Medicine** *Strowick, Elisabeth* Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).	3.00	25	MW 12:00-1:15PM

History of Science & Technology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.389.275	01	HS		**Interpreting Collections: An Introduction to Museum Education** *Staff* Part public history, part introduction to museum practices, this hands-on course invites students into a local collection to develop interpretive materials for diverse audiences. Students consider the issues and ideas that inform object-based learning and learn about the history, theory and practice of museum education. Course culminates in the creation of interpretive text for the Baltimore Museum of Industry. M&S practicum course.	3.00	12	T 1:30-3:50PM

Humanities Center

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.070.132	01	HS	W	**Invitation to Anthropology** *Poole, Deborah* Through readings that explore how anthropologists study such issues as race, gender, migration, territory, and the environment, this course introduces students to anthropology as a field of research and reflection that interrogates what it means to be human.Cross-listed with Humanities Center and PLAS.	3.00	75	TTh 12:00-1:15PM
AS.300.282	01	H	W	**Great Poems of the Americas: Post-Epics** *Galvin, Rachel* “In America the natural man has triumphed over the imported book,” announced José Martí. The call to cast off the literary forms of Old Europe echoed throughout the hemisphere during the 20th century, as poets sought to write a new kind of “American” poetry. The epic has been rearticulated in sequences and series, verse novels, lyric cycles, and collage poems, such that it has become the “post-epic.” We will investigate the long poem in 20th-century North and Latin America, from the encyclopedic Cantos of Ezra Pound and the sweeping Canto General of Pablo Neruda to briefer works by Derek Walcott and Gwendolyn Brooks, and fragmented series by Gertrude Stein and César Vallejo. We will read texts including Charles Olson’s sprawling history of America, The Maximus Poems, and William Carlos William’s Paterson; Aimé Césaire’s Notebook of a Return to My Native Land and Kamau Brathwaite’s The Arrivants; Elizabeth Bishop’s cartographic North & South; Octavio Paz’s single, 584-line, cyclical sentence, Sunstone; and Vicente Huidobro’s careening, linguistically playful Altazor. As we test our definition of “post-epic” against these texts, we will consider whether the term may be applied equally to the heroic tale and the “open field” poem. To situate the long poem in history, we will examine changes in poetic form alongside questions of modernization and globalization, technology and development, and socio-political transformation.	3.00	15	MW 3:00-4:15PM
AS.300.301	01	H	W	**Life, Vitality, Thought. Philosophy and the Natural Sciences in Nineteenth Century Europe** *McGrath, Larry Sommer* Last year neuroscientists at MIT shined an optogenetic light on brain cells in order to artificially stimulate memories. If every detail of our past has a particular location in the brain, then we could alter, and even destroy, memories. Does this mean that humans are like machines whose history can be erased as easily as we delete files on a computer? Or are memories, like consciousness, not so easily reducible to brain structures? This class will examine how these and other questions shaped the history of modern biology and experimental psychology beginning in the nineteenth century. We will read the works of prominent biologists, psychologists, and philosophers who were all involved in a rich debate over the nature of life and thought.	3.00	25	TTh 3:00-4:15PM

Humanities Center

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.300.318	01	H		**The Modernist Novel: Mann, Woolf, and Joyce** *Ong, Yi-Ping* The purpose of this course is to survey works by three of the greatest, most relentless innovators of the twentieth century – Thomas Mann, Virginia Woolf, and James Joyce -- who explored and exploded narrative techniques for depicting what Woolf called the "luminous halo" of life. Selected novels include: Death in Venice, Buddenbrooks, Jacob's Room, Mrs. Dalloway, To the Lighthouse, A Portrait of the Artist as a Young Man, and Ulysses.	3.00	20	MW 12:00-1:15PM
AS.300.336	01	H		**Jewish Tradition and Philosophical Modernity: Buber, Rosenzweig, Levinas** *Buijs, Martijn* All readings in English. Three Jewish thinkers of the twentieth century – Martin Buber, Franz Rosenzweig, and Emmanuel Levinas – propagate a radically new kind of philosophy. This philosophy strongly rejects both Idealism and materialism, and brings into sharp focus themes of temporality and finitude, of otherness and openness; and it does so precisely in articulating a new relationship to the religious. All three of these authors are first and foremost philosophers – builders of abstract and universal systems of meaning. They are also tied intimately, precisely as thinkers, to the Jewish tradition, which feeds and supports their radically innovative philosophical pursuits. This course will examine the way philosophical modernity – often seen as anti-religious – and religious tradition – accused of stifling conservatism – in fact form a curious yet potent alliance in the work of these three. We will investigate these authors in relation to a range of Jewish sources from different ages and different genres – from Biblical tales and Talmudic discussions, through Midrashic interpretations and Rashi's commentaries, to the philosophy of Maimonides and, last but not least, the poetry of Yehuda Halevi. The goal of the course is to see how some of the classical texts of Jewish tradition shape, and are in turn shaped by, such philosophies, and to thus examine how the universality of reason and Jewish particularism are able to interact.	3.00	15	MW 12:00-1:15PM
AS.300.338	01	H	W	**Art, Action, Intention** *Boyce, Kristin*	3.00	15	TTh 10:30-11:45AM

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Since the publication of Monroe Beardsley and William K. Wimsatt's "The Intentional Fallacy," debate about the relevance of the artist's intentions to the meaning and interpretation of the works she creates has been ongoing. How one understands the relevance of an artist's intentions depends, in part, on how one understands the concept of "intention," one of the central topics of Philosophy of Action. This course examines how resources in the philosophy of action have been brought to bear in order to illuminate the topic of artistic intention. It is also concerned to explore how accounting more adequately for the relevance of an artist's intentions in particular might contribute to a more adequate analysis of the concept of "intention" more generally. This course is open to both graduates students and undergraduates.			
AS.300.352	01	H	W	**Fictions of Autobiography** *Macksey, Richard A* A comparative survey of autobiographical writing as a creative process. Beginning with a few classic examples (Augustine, Petrarch, Montaigne, Rousseau), the seminar will proceed to more recent adventures in the first-person singular. Modern instances will include self-creation in several genres and media, including narrative, dramatic, and cinematic forms. Seminar meets at 107 St. Martin's Road.	3.00	15	Th 4:30-7:00PM
AS.300.360	01	H		**Critical Thinking and its History** *Marrati, Paola* This course aims at discussing different conceptions of "critique" and "critical thinking" in modern and contemporary philosophy. Readings include: Descartes, Kant, Adorno, Foucault, Arendt, Said, Butler.	3.00	20	Th 1:30-4:00PM
AS.300.370	01	H		**What Computers Can't Do and other Controversies** *Leys, Ruth* A critical examination of recent debates over the interface between the humanities and the natural sciences. Topics include: computer models of the mind; consciousness and the brain; affect theory and the neurosciences; mirror neuron theory; literature and the natural sciences; the new trauma theory.	3.00	20	W 1:30-3:50PM
AS.300.412	01	H		**Flaubert** *Fried, Michael* Through a close reading of Flaubert's novel, selective consideration of the drafts and of the historical, political and artistic context, we shall examine the making of that masterpiece of narrative prose, which Flaubert himself conceived under the sign of modernity. Our central concern, in other words, is with L' Éducation sentimentale as a second crucial event in aesthetic modernity, twenty two years after Madame Bovary. Seminar will be taught in French and English. L'Education sentimentale edition required: GF Flammarion, 2003. Co-listed with 300.604	3.00	3	T 1:30-3:50PM
AS.371.140	01	H		**Cartooning** *Chalkley, Thomas*	3.00	15	M 1:30-4:20PM

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Not open to Freshmen. A history-and-practice overview for students of the liberal arts. The conceptual basis and historical development of cartooning is examined in both artistic and social contexts. Class sessions consist of lecture (slides/handouts), exercises, and ongoing assignments. Topics include visual/narrative analysis, symbol & satire, editorial/political cartoons, character development, animation. Basic drawing skills are preferred but not required.			
AS.371.151	01	H		**Photoshop/Dig Darkroom** *Ehrenfeld, Howard* Photoshop is not only the digital darkroom for processing images created with digital cameras; it is also a creative application for making original artwork. In this course, students use Photoshop software as a tool to produce images from a fine art perspective, working on projects that demand creative thinking while gaining technical expertise. Students will make archival prints, have regular critiques, and attend lectures on the history of the manipulated image and its place in culture. We will look at art movements which inspire digital artists, including 19th century collage, dada, surrealism, and the zeitgeist of Hollywood films. Students must have a digital camera. Prior knowledge of Photoshop is not required. Attendance at first class is mandatory.	3.00	10	M 10:00AM-12:50PM
AS.371.152	01	H		**Introduction to Digital Photography** *Ehrenfeld, Howard* Introduction to Digital Photography Students learn to use their digital cameras through a variety of projects, which will help them develop technical and creative skills. Students explore documentary, landscape and portrait photography. Critiques and slide lectures of historic photographs, which range from postmortem daguerreotypes to postmodern digital imagery, help students develop a personal vision. Students gain camera proficiency with one-on-one instruction in the field. Basics for print adjustment and output will be covered. Attendance at first class is mandatory.	3.00	10	T 10:00AM-12:50PM
AS.371.162	01	H		**Black & White: Digital Darkroom** *Berger, Phyllis A* In this digital course, students explore the beauty, evocative nature and artistry inherent in black and white photography. They develop camera skills on numerous field trips including Ladew Topiary Gardens, the John Brown Liberty Ship and an optional weekend trip to Cape Henlopen State Park in Delaware. Students meet frequently for critiques and discussions based on historic and contemporary imagery. They will learn to use Photoshop and Nik Silver Efex for image adjustment. Techniques such as high dynamic range, infrared, and panorama will be covered. Students work on a project of their choice and produce a portfolio of ten prints. Digital SLRs are provided. Attendance at 1st class is mandatory.	3.00	10	W 10:00AM-12:50PM

Humanities Center

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.371.162	02	H		**Black & White: Digital Darkroom**	3.00	10	W 2:00-4:50PM
AS.371.303	01	H		**Documentary Photography** *Berger, Phyllis A* Attendance at first class is mandatory. In this course, we will explore different genres of documentary photography, including the fine art document, photojournalism, social documentary photography, the photo essay and photography of propaganda. Students will work on a semester-long photo-documentary project on a subject of their choice. Digital SLRs will be provided.	3.00	10	F 10:00AM-1:00PM
AS.371.303	02	H		**Documentary Photography**	3.00	10	F 2:00-4:50PM

Interdepartmental

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.570.428	01	S	W	**Problems in Applied Economics** *Hanke, Steve H* Permission Required. This course brings the principles of economic theory to bear upon particular problems in the fields of economics, finance and public policy. Micro, macro and international problems, from both the private and public sectors, are addressed. A heavy emphasis is placed on research and writing. Students learn how to properly conduct substantive economic research, utilizing statistical techniques and lessons from economic history. Findings are presented in the form of either memoranda or working papers. Exceptional work may be suitable for publication through the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise.	3.00	20	TBA
EN.570.470	01	QS	W	**Applied Econ & Finance** *Hanke, Steve H* Prerequisite EN.660.203 – Permission Required. This course focuses on company valuations, using the proprietary Hanke-Guttridge Discounted Free Cash Flow Model. Students use the model and data from financial statements filed with the Securities and Exchange Commission to calculate the value of publicaly-traded companies. Using Monte Carlo simulations, students also generate forecast scenarios, project likely share-price ranges and assess potential gains/losses. Stress is placed on using these simulations to diagnose the subjective market expectations contained in current objective market prices, and the robustness of these expectations. During the weekly seminar, students' company valuations are reviewed and critiqued.	3.00	20	F 1:30-4:30PM
EN.570.487	01	S	W	**Financial Market Research** *Hanke, Steve H* Permission Required. This course investigates the workings of financial, foreign exchange, and commodity futures markets. Research is focused on price behavior, speculation, and hedging in these markets. Extensive research and writing is required. Exceptional work may be suitable for publication through the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise.	3.00	20	TBA

International Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.215.327	01	H	W	**Modern Political Thought in Latin America** *Castro-Klaren, Sara* Juniors and Seniors only. The course is an introduction to modern political tough in Latin America. It draws on essays and novels written by major and influential political thinkers such as D.F. Sarmiento, Gonzalez Prada, J.C. Mariategui, Leopoldo Zea, J. E. Rodo, Octavio Paz, Jose Revueltas, Jose Maria Arguedas, Mario Vargas Llosa, Darcy Ribeiro, Enrique Dusssel and the authors of the Sumac Kawsay as well as Liberation Theology central writings. The course will be taught in English. Students wishing to do work in the original Spanish or Portuguese will be encouraged to do so.	3.00	25	W 1:30-4:00PM
AS.230.150	01	S		**Issues in International Development** *Agarwala, Rina* Freshmen and Sophomores only. This course will provide an undergraduate level introduction to the study and practice, as well as the successes and failures, of international development. Students will be introduced to the various theoretical frameworks used to explain underdevelopment. Students will also explore the practice of development since the 1950s by examining specific strategies employed in Latin America, South Asia, East Asia, and Africa. Using a variety of country-specific case studies, students will have the opportunity to apply the theoretical and practical frameworks learned in the class to assess the successes and failures of real-life cases. Fufills Economics requirement for IS GSCD track students only.	3.00	30	W 1:30-3:20PM; F 1:30-2:20PM
AS.230.150	02	S		**Issues in International Development**	3.00	30	W 1:30-3:20PM; F 2:30-3:20PM
AS.230.228	01	S		**Colonialism in Asia and Its Contested Legacies** *Kuo, Huei-Ying*	3.00	20	TTh 1:30-2:45PM

International Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This seminar examines the theories and historiography of colonialism in Asia, with special focus on the development of British Straits Settlements and Hong Kong as well as Japanese Taiwan. We will review the competing discourses about the impact of colonial dominations in these areas from the 1800s to the present-day. In the beginning of the era, the British built up the economic linkage between Hong Kong and Penang, Malacca as well as Singapore to sustain its dominance throughout the "Far East." In the middle of the period, the expanding Japanese empire developed Taiwan as a footstep to compete with the British interests in South China and Southeast Asia. Hong Kong and the Straits Settlements, especially Singapore, became the contested terrain where two colonial powers vied for their influences in the region. The competition was not only about trade, but about the construction of a new East Asian regional order after the end of the Chinese hegemony. In the end of the period, the intervention of the US power in postwar Asia facilitated the retreat of the colonial establishments, British and Japanese ones included. The course that compares the colonial establishments and discourses on colonial legacies among the three areas points out that colonialism constituted an inalienable part of Asian history. Cross listed International Studies (CP) and East Asian Studies. Fufills History requirement for IS GSCD track students only.			
AS.230.344	01	S	W	**Health and Society in Contemporary China** *Core, Rachel S* This class examines the social and health consequences of systemic transformations in China, including collapse of the urban work-unit system, resurgence of infectious disease, and implementation of the One-Child Policy. Dean's Teaching Fellowship; Cross listed with East Asian Studies, Public Health and International Studies	3.00	20	TTh 3:00-4:15PM
AS.230.346	01	S		**Contemporary Economic Sociology of Latin America** *von der Heydt-Coca, Magda Zonia*	3.00	25	TTh 10:30-11:45AM

International Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course will offer an overview of Latin America's economic reality as an intertwined process of economic and political domestic factors within the constraints of the world economy. Latin American development will be analyzed from ahistorical perspective. The first half of the semester the course will focus on the analysis of the economic developmental patterns starting in the middle of the 19thcentury to the populist era in the middle of the 20thcentury. In the second half of the semester, we will analyze in depth the contemporary neoliberal approach to development. Globalization is the force that drives economic, social and political processes in Latin America. The course will include case studies as well the social conflicts generated by the increasing polarization of the society. Students will be exposed to important sociological theories. Cross-listed with the Program in Latin American Studies and International Studies. Fulfills Economics requirement fo IS GSCD students only.			
AS.230.356	01	S		**Contemporary African Social Movements** *Scully, Benjamin Thomas* This course is a survey of contemporary social movements in sub-Saharan Africa. The course will begin with an introduction to social movement theory. Subsequent weeks will each focus on a different type of movement (e.g. independence movements, labor movements, women's movements, environmental movements, etc.) The limited coverage of African issues in the US media tends to focus on either catastrophes or on development projects that are driven by international NGOs and the governments of northern countries. Through this course, students will gain a clear understanding of the broad range of actions that African civil society is using to address social problems throughout the continent. Materials used will include academic analysis of movements, writings by movement participants themselves, and films. The course will also introduce students to the most widely used social movement theories. Because these theories have been largely developed by social scientists in northern countries, the students will be asked to assess their applicability to African movements. Through this critical application of social theory, students will investigate the specific possibilities and constraints facing social and political actors in contemporary Africa. Cross listed with Dean's Teaching Fellowship, International Studies (CP) and Africana Studies.	3.00	20	TTh 3:00-4:15PM
AS.230.362	01	S	W	**Migration & Development** *Agarwala, Rina*	3.00	30	M 3:00-5:30PM

International Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course focuses on the relationship between international migration and development. The course first introduces theories of international migration, immigrant integration, and international development. Building on this foundation, we then examine how immigrants interact with their homeland and how sending country governments tap their diaspora t0 improve development outcomes. Cross-listed with International Studies (CP, IR) Fulfills Economics requirement for IS GSCD track students only.			
AS.230.366	01	S	W	**From Habeas Corpus to Eminent Domain: Urban Development and Urban Planning in Comparative-Historical Perspective** *Pasciuti, Daniel Steven* This course offers a broad survey of urban development in the United States by examining both the intended and unintended consequences of urban planning. Using a comparative-historical framework, issues of power, conflict, representation, participation, and planning within urban development and the American city will be addressed and critiqued with specific reference to Baltimore. Cross listed with International Studies (AP). Fufills History requirement for IS GSCD track students only.	3.00	20	MW 3:00-4:15PM

Jewish Studies Program

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.040.102	01	H		**Jews, Greeks and Others in Ancient Israel: Historical and Archeological Aspects of Cultural Interactions** *Fischer, Moshe Ladislav* This course will study cultural interactions in Ancient Israel from Classical times to Late Antiquity (5th century BCE – 8th century CE) from both the archaeological and historical points of view. Priority will be given to material evidence of the possible character of the pluralistic societies which were typical of Ancient Israel during these periods. Issues on which the course is focused will include Jews, Greeks, Phoenicians under Persian rule; Jews and Greeks in Hellenistic Palestine (the backdrop to the Maccabean wars) and the time of Herod the Great (the background for events of the first and second centuries CE). Examination of archaeology of the Holy Land in the first centuries of Christianity, in particular the impact of Christian pilgrimage on Palestinian society, and later the interaction with Islam. Cross-listed with Jewish Studies Program	3.00	25	TTh 9:00-10:15AM
AS.100.317	01	HS	W	**Jewish Music** *Walden, Joshua S* What is "Jewish music," and what roles has it played in global and Jewish cultures? This course will address these questions, considering genres and contexts of Jewish music from cantillation to klezmer and from art music to Yiddish cinema. Cross listed with Jewish Studies	3.00	20	Th 2:00-4:30PM
AS.130.302	01	H		**History: Ancient Syria-Palestine II** *McCarter, P Kyle, Jr.* A survey of the history of Ancient Syria and Cannan, including ancient Israel. Taught with 134.661 Cross-listed with Jewish Studies	3.00	40	MW 12:00-1:15PM
AS.130.352	01	H		**History of Hasidism** *Katz, David* Although it appears to be a relic of pre-modern Judaism, Hasidism is a phenomenon of the modern era of Jewish history. This course surveys the political and social history of the Hasidic movement over the course of the last three centuries. Students will also explore basic features of Hasidic culture and thought in their historical development. Cross-listed with Jewish Studies	3.00	40	TTh 9:00-10:15AM
AS.130.441	01	H		**Elem Biblical Hebrew** *Simone, Michael R.* Survey of grammar and reading of simple texts. (Credit given only on completion of AS.130.440 and AS.130.441). May not be taken on a satisfactory/unsatisfactory basis.	3.00	20	TBA
AS.210.164	01	H		**Elementary Yiddish II** *Caplan, Beatrice*	3.00	17	TTh 9:00-10:15AM

Jewish Studies Program

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites: 210.163 or Permission of the instructor Year-long course. Includes the four language skills--reading, writing, listening, and speaking--and introduces students to Yiddish culture through text, song, and film. Emphasis is placed both on the acquisition of Yiddish as a tool for the study of Yiddish literature and Ashkenazic history and culture, and on the active use of the language in oral and written communication. Both semesters must be taken with a passing grade to receive credit.			
AS.211.253	01	H		**Freshman Seminar: Why is the Fiddler on the Roof?: The Shtetl in Modern Jewish Culture** *Caplan, Beatrice* The most familiar portrayal of the shtetl for an American audience is the setting of the Broadway musical Fiddler on the Roof, where the shtetl, or market town, is a bastion of traditional Jewish life. But what exactly was a shtetl? How did traditional Jews live there, and how were their lives affected by the sweep of modernity? How was the Yiddish language, spoken by all shtetl Jews, both a repository of tradition and an agent of change? How do representations of the shtetl--from corrupt backwater to pious haven--reflect the concerns of Jews from the nineteenth century up to our own day? Through memoir, literature, film and painting, this course will examine actual lives lived in the shtetl, as well as a selection of the many artistic representations of it. All readings will be in English.	3.00	15	TTh 12:00-1:15PM
AS.211.430	01	H		**L'Affaire Dreyfus** *Cook-Gailloud, Kristin* This course proposes to look at persuasive strategies that were engaged during the Dreyfus Affair in order to either incriminate or discriminate the Jewish captain falsely accused of having betrayed the French army. Course will focus on the socio-political events that framed the Dreyfus Affair (anti-Semitism in 19th-century France, caricatures and polemical writings in the press, the consequences of the Franco-Prussian War and of the Commune, the bipolar division that split French society into Dreyfusards and anti-Dreyfusards), as well as its long-term effects (the rise of the extreme right, the creation of the "intellectual", the consolidation of Zionism which ultimately led to the creation of a Jewish state). Prerequisites: 210.301-302 or 210.301 or permission of instructor.	3.00	15	MWF 12:00-12:50PM
AS.213.332	01	H	W	**Zionism in Modern Literature: Jewish or Israeli?** *Caplan, Marc*	3.00	50	MW 12:00-1:15PM

Jewish Studies Program

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course will be an examination of the themes of nationalism, Zionism, and the problems of the nation-state in modern Jewish literature of the past hundred years. Among the topics we will consider are the unique challenges of a diasporic culture relocating its national aspirations to an unfamiliar and often hostile environment, the controversies surrounding political nationalism within modern Jewish culture, the competition between languages in the formation of Israeli society, the character of Israeli national culture, the relationship of Israel's Jewish majority with its minority population, and the relationship of Israeli culture to the Jewish culture of the diaspora. To what extent does Israeli literature constitute a continuation of themes and techniques found in previous Jewish writing, and to what extent does it represent a new beginning? To what extent can Israeli literature be compared with other varieties of Jewish writing and to what extent is this writing a unique cultural phenomenon? Although the majority of works discussed will be translated from Hebrew—including such leading figures of Israeli literature as S. Y. Agnon, S. Yizhar, Amos Oz, and Orly Castel-Bloom—we will also be considering works translated from Yiddish (Mendele Moykher-Sforim), German (Theodor Herzl), and Arabic (Emile Habiby), as well as contemporary American writers such as Philip Roth and Michael Chabon. All readings and discussions conducted in English. Cross-listed with Jewish Studies, English, and the Humanities Center			
AS.300.336	01	H		**Jewish Tradition and Philosophical Modernity: Buber, Rosenzweig, Levinas** *Buijs, Martijn*	3.00	15	MW 12:00-1:15PM

Jewish Studies Program

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				All readings in English. Three Jewish thinkers of the twentieth century – Martin Buber, Franz Rosenzweig, and Emmanuel Levinas – propagate a radically new kind of philosophy. This philosophy strongly rejects both Idealism and materialism, and brings into sharp focus themes of temporality and finitude, of otherness and openness; and it does so precisely in articulating a new relationship to the religious. All three of these authors are first and foremost philosophers – builders of abstract and universal systems of meaning. They are also tied intimately, precisely as thinkers, to the Jewish tradition, which feeds and supports their radically innovative philosophical pursuits. This course will examine the way philosophical modernity – often seen as anti-religious – and religious tradition – accused of stifling conservatism – in fact form a curious yet potent alliance in the work of these three. We will investigate these authors in relation to a range of Jewish sources from different ages and different genres – from Biblical tales and Talmudic discussions, through Midrashic interpretations and Rashi's commentaries, to the philosophy of Maimonides and, last but not least, the poetry of Yehuda Halevi. The goal of the course is to see how some of the classical texts of Jewish tradition shape, and are in turn shaped by, such philosophies, and to thus examine how the universality of reason and Jewish particularism are able to interact.			
AS.384.116	01	H		**First Year Modern Hebrew II** *Cohen, Zvi* Pre-req 384.115. Designed to provide reading and writing mastery, to provide a foundation in Hebrew grammar and to provide basic conversational skills. Cross-listed with Jewish Studies.	4.00	15	MTWTh 9:00-9:50AM
AS.384.216	01			**Second Year Modern Hebrew II** *Cohen, Zvi* Pre-req 384.215. Designed to enrich vocabulary and provide intensive grammatical review, and enhance fluency in reading, writing and comprehension. Cross-listed with Jewish Studies.	4.00	10	MW 10:00-10:50AM; TTh 10:30-11:20AM
AS.384.316	01	H		**Third Year Modern Hebrew II** *Cohen, Zvi* Pre-req 384.315. Designed to: maximize comprehension and the spoken language through literary and newspaper excerpts providing the student with the language of an educated Israeli. Cross-listed with Jewish Studies.	4.00	10	MTWTh 3:00-3:50PM

Mathematics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.110.106	01	Q		**Calculus I** *Marshburn, Nicholas* Differential and integral calculus. Includes analytic geometry, functions, limits, integrals and derivatives, introduction to differential equations, functions of several variables, linear systems, and applications for systems of linear differential equations, probability distributions. For Biological and Social Sciences Majors.	4.00	30	MWF 10:00-10:50AM; T 4:30-5:20PM
AS.110.106	02	Q		**Calculus I**	4.00	30	MWF 10:00-10:50AM; Th 3:00-3:50PM
AS.110.106	03	Q		**Calculus I**	4.00	30	MWF 10:00-10:50AM; Th 4:30-5:20PM
AS.110.107	01	Q		**Calculus II (For Biological and Social Science)** *Li, Yi* Prereq: Calculus I Differential and integral calculus. Includes analytic geometry, functions, limits, integrals and derivatives, introduction to differential equations, functions of several variables, linear systems, applications for systems of linear differential equations, probability distributions. For Biological and Social Sciences Majors.	4.00	30	MWF 10:00-10:50AM; T 1:30-2:20PM
AS.110.107	02	Q		**Calculus II (For Biological and Social Science)**	4.00	30	MWF 10:00-10:50AM; T 3:00-3:50PM
AS.110.107	03	Q		**Calculus II (For Biological and Social Science)**	4.00	30	MWF 10:00-10:50AM; T 4:30-5:20PM
AS.110.107	04	Q		**Calculus II (For Biological and Social Science)**	4.00	30	MWF 10:00-10:50AM; Th 1:30-2:20PM
AS.110.107	05	Q		**Calculus II (For Biological and Social Science)**	4.00	30	MWF 11:00-11:50AM; Th 3:00-3:50PM
AS.110.107	06	Q		**Calculus II (For Biological and Social Science)**	4.00	30	MWF 11:00-11:50AM; Th 4:30-5:20PM
AS.110.107	07	Q		**Calculus II (For Biological and Social Science)**	4.00	30	MWF 11:00-11:50AM; T 3:00-3:50PM
AS.110.109	01	Q		**Calculus II (For Physical Sciences and Engineering)** *Arap, Maxim* Prereq: Calculus I Differential and integral calculus. Includes analytic geometry, functions, limits, integrals and derivatives, polar coordinates, parametric equations, Taylor's theorem and applications, infinite sequences and series. For Physical Sciences and Engineering Majors.	4.00	30	MWF 10:00-10:50AM; T 3:00-3:50PM
AS.110.109	02	Q		**Calculus II (For Physical Sciences and Engineering)**	4.00	30	MWF 10:00-10:50AM; T 4:30-5:20PM
AS.110.109	03	Q		**Calculus II (For Physical Sciences and Engineering)**	4.00	30	MWF 10:00-10:50AM; Th 1:30-2:20PM
AS.110.109	04	Q		**Calculus II (For Physical Sciences and Engineering)**	4.00	30	MWF 10:00-10:50AM; Th 3:00-3:50PM
AS.110.109	05	Q		**Calculus II (For Physical Sciences and Engineering)**	4.00	30	MWF 10:00-10:50AM; T 3:00-3:50PM
AS.110.109	06	Q		**Calculus II (For Physical Sciences and Engineering)**	4.00	28	MTW 10:00-10:50AM; F 9:00-9:50AM

Mathematics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.110.201	01	Q		**Linear Algebra** *McTague, Carl* Prereq: Calculus I Vector spaces, matrices, and linear transformations. Solutions of systems of linear equations. Eigenvalues, eigenvectors, and diagonalization of matrices. Applications to differential equations.	4.00	30	MWF 10:00-10:50AM; T 1:30-2:20PM
AS.110.201	02	Q		**Linear Algebra**	4.00	30	MWF 10:00-10:50AM; T 3:00-3:50PM
AS.110.201	03	Q		**Linear Algebra**	4.00	30	MWF 10:00-10:50AM; T 4:30-5:20PM
AS.110.201	04	Q		**Linear Algebra**	4.00	30	MWF 10:00-10:50AM; Th 1:30-2:20PM
AS.110.201	05	Q		**Linear Algebra**	4.00	30	MWF 10:00-10:50AM; Th 3:00-3:50PM
AS.110.201	06	Q		**Linear Algebra**	4.00	30	MWF 10:00-10:50AM; Th 4:30-5:20PM
AS.110.201	07	Q		**Linear Algebra**	4.00	30	MWF 11:00-11:50AM; T 1:30-2:20PM
AS.110.201	08	Q		**Linear Algebra**	4.00	30	MWF 11:00-11:50AM; T 3:00-3:50PM
AS.110.201	09	Q		**Linear Algebra**	4.00	30	MWF 11:00-11:50AM; Th 1:30-2:20PM
AS.110.202	01	Q		**Calculus III** *Gjoneski, Oliver* Prereq: 110.107, 110.109 or 110.112. Calculus of functions of more than one variable: partial derivatives, and applications; multiple integrals, line and surface integrals; Green's Theorem, Stokes' Theorem, and Gauss' Divergence Theorem.	4.00	30	MWF 11:00-11:50AM; T 1:30-2:20PM
AS.110.202	02	Q		**Calculus III**	4.00	30	MWF 11:00-11:50AM; T 3:00-3:50PM
AS.110.202	03	Q		**Calculus III**	4.00	30	MWF 11:00-11:50AM; Th 4:30-5:20PM
AS.110.202	04	Q		**Calculus III**	4.00	30	MWF 11:00-11:50AM; Th 1:30-2:20PM
AS.110.202	05	Q		**Calculus III**	4.00	30	MWF 12:00-12:50PM; T 4:30-5:20PM
AS.110.202	06	Q		**Calculus III**	4.00	30	MWF 12:00-12:50PM; Th 1:30-2:20PM
AS.110.202	07	Q		**Calculus III**	4.00	30	MWF 12:00-12:50PM; Th 3:00-3:50PM
AS.110.202	08	Q		**Calculus III**	4.00	30	MWF 12:00-12:50PM; Th 4:30-5:20PM
AS.110.211	01	Q		**Honors Multivariable Calculus** *Bayraktar, Turgay* Prereq: New wording: Calculus II, or 5 on the Calculus BC AP Exam, or 110.113 AND 110.201 or 110.212. If Linear Alg is being used as the rereq a grade of B+ or better is required. Linear Alg can also be taken as a co-requisite. This course includes the material in Calculus III (202) with some additional applications and theory. Recommended for mathematically able students majoring in physical science, engineering, or especially mathematics. 110.211 -212 used to be an integrated yearlong course, but now the two are independent courses and can be taken in either order.	4.00	35	MW 12:00-1:15PM; F 12:00-12:50PM
AS.110.212	01	Q		**Honors Linear Algebra** *Wilson, W Stephen* This course includes the material in Linear Algebra (201) with some additional applications and theory. Recommended for mathematically able students majoring in physical science, engineering, or mathematics. Prereq: Calculus II or III or equivalent, preferably honors.	4.00	45	MW 1:30-2:45PM; F 1:30-2:20PM
AS.110.302	01	EQ		**Diff Equations/Applic** *Wang, Lu*	4.00	30	MWF 12:00-12:50PM; T 1:30-2:20PM

Mathematics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This is an applied course in ordinary differential equations, which is primarily for students in the biological, physical and social sciences, and engineering. The purpose of the course is to familiarize the student with the techniques of solving ordinary differential equations. Prereq: Calculus II			
AS.110.302	01	Q		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; T 1:30-2:20PM
AS.110.302	02	EQ		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; T 3:00-3:50PM
AS.110.302	02	Q		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; T 3:00-3:50PM
AS.110.302	03	EQ		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; Th 3:00-3:50PM
AS.110.302	03	Q		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; Th 3:00-3:50PM
AS.110.302	04	EQ		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; Th 4:30-5:20PM
AS.110.302	04	Q		**Diff Equations/Applic**	4.00	30	MWF 12:00-12:50PM; Th 4:30-5:20PM
AS.110.302	05	EQ		**Diff Equations/Applic**	4.00	30	MWF 1:30-2:20PM; T 4:30-5:20PM
AS.110.302	05	Q		**Diff Equations/Applic**	4.00	30	MWF 1:30-2:20PM; T 4:30-5:20PM
AS.110.302	06	EQ		**Diff Equations/Applic**	4.00	30	MWF 1:30-2:20PM; Th 1:30-2:20PM
AS.110.302	06	Q		**Diff Equations/Applic**	4.00	30	MWF 1:30-2:20PM; Th 1:30-2:20PM
AS.110.302	07	EQ		**Diff Equations/Applic**	4.00	30	MWF 1:30-2:20PM; Th 3:00-3:50PM
AS.110.302	07	Q		**Diff Equations/Applic**	4.00	30	MWF 1:30-2:20PM; Th 3:00-3:50PM
AS.110.304	01	Q		**Elementary Number Theory** *Kong, Jian* Prereq: Calculus II and Linear Algebra. The student is provided with many historical examples of topics, each of which serves as an illustration of and provides a background for many years of current research in number theory. Primes and prime factorization, congruences, Euler's function, quadratic reciprocity, primitive roots, solutions to polynomial congruences (Chevalley's theorem), Diophantine equations including the Pythagorean and Pell equations, Gaussian integers, Dirichlet's theorem on primes.	4.00	40	TTh 9:00-10:15AM
AS.110.311	01	Q		**Complex Analysis** *Lind, John* Prereq: Calculus III This course is an introduction to the theory of functions of one complex variable. Its emphasis is on techniques and applications, and it serves as a basis for more advanced courses. Functions of a complex variable and their derivatives; power series and Laurent expansions; Cauchy integral theorem and formula; calculus of residues and contour integrals; harmonic functions.	4.00	40	TTh 12:00-1:15PM
AS.110.401	01	Q		**Advanced Algebra I** *Arap, Maxim* Prereq: Linear Algebra An introduction to the basic notions of modern algebra. Elements of group theory: groups, subgroups, normal subgroups, quotients, homomorphisms. Generators and relations, free groups, products, commutative (Abelian) groups, finite groups. Groups acting on sets, the Sylow theorems. Definition and examples of rings and ideals. Introduction to field theory. Linear algebra over a field. Field extensions, constructible polygons, non-trisectability.	4.00	30	MW 12:00-1:15PM; F 12:00-12:50PM

Mathematics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.110.402	01	Q		**Advanced Algebra II** *Consani, Caterina* Splitting field of a polynomial, algebraic closure of a field. Galois theory: correspondence between subgroups and subfields. Solvability of polynomial equations by radicals.	4.00	30	F 12:00-12:50PM; MW 12:00-1:15PM
AS.110.405	01	Q		**Analysis I** *Bayraktar, Turgay* This course is designed to give a firm grounding in the basic tools of analysis. It is recommended as preparation (but may not be a prerequisite) for other advanced analysis courses. Real and complex number systems, topology of metric spaces, limits, continuity, infinite sequences and series, differentiation, Riemann-Stieltjes integration.	4.00	30	MW 1:30-2:45PM; F 1:30-2:20PM
AS.110.413	01	Q		**Intro to Topology** *Lind, John* Topological spaces, connectedness, compactness, quotient spaces, metric spaces, function spaces. An introduction to algebraic topology: covering spaces, the fundamental group, and other topics as time permits.	4.00	30	TTh 10:30-11:45AM
AS.110.416	01	Q		**Honors Analysis II** *Gomez, Jose* Prerequisite: 110.415, or 110.405 and permission of the instructor Continuation of 110.415, introduction to real analysis. Lebesgue integration and differentiation. Elementary Hilbert and Banach space theory. Baire category theorem.	4.00	30	MW 1:30-2:45PM; F 1:30-2:20PM
AS.110.417	01	EQ		**Partial Diff Equations** *Tohaneanu, Mihai* Prereqs: 110.202 and (110.405 or 110.415). Characteristics. classification of second order equations, well-posed problems. separation of variables and expansions of solutions. The wave equation: Cauchy problem, Poisson's solution, energy inequalities, domains of influence and dependence. Laplace's equation: Poisson's formula, maximum principles, Green's functions, potential theory Dirichlet and Neumann problems, eigenvalue problems. The heat equation: fundamental solutions, maximum principles.	4.00	35	TTh 12:00-1:15PM
AS.110.417	01	Q		**Partial Diff Equations**	4.00	35	TTh 12:00-1:15PM
AS.110.421	01	Q		**Dynamical Systems** *Brown, Richard* Prereqs: Calculus III, Linear Algebra, ODEs. This is a course in the modern theory of Dynamical Systems. Topic include existence and uniqueness of general ODEs, nonlinear analysis and stability, including bifurcation theory and stable and center manifolds, smooth flows, limit sets, Hamiltonian mechanics, perturbation theory and structural stability.	4.00	35	TTh 3:00-4:15PM

Military Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.374.102	01		W	**Introduction to Leadership II** *Bushyager, Jeremy* (Freshmen only) Establishes a foundation of basic leadership fundamentals such as: problem solving, communications, effective writing, goal setting, improving speaking and listening skills, and an introduction to counseling.	2.00	30	W 1:30-3:20PM
AS.374.102	02		W	**Introduction to Leadership II**	2.00	30	Th 1:30-3:20PM
AS.374.120	01			**Basic Leadership Laboratory** *Bushyager, Jeremy* Students learn and apply team echelon leadership at an entry level. They continue development of military courtesy, discipline, communication and basic Soldier skills. Ultimately, students understand how to operate in and lead 4-5 persons through a program of training opportunities in a variety of conditions. Freshmen only	1.00	50	Th 4:00-5:50PM
AS.374.202	01			**Leadership & Teamwork** *Seay, Shane* Prereq: 374.201 or Perm Req'd Class examines how to build effective teams, various methods for influencing action, effective communication in setting and achieving goals, decision-making, creativity in problem solving, and providing feedback.	2.00	30	Th 1:30-3:20PM
AS.374.202	02			**Leadership & Teamwork**	2.00	25	TBA
AS.374.220	01			**Advanced Team Leadership** *Seay, Shane* Students perform duties of and develop their leadership, as team leaders during a variety of induced training opportunities. Continued emphasis is placed on troop-leading-procedures and simple problem solving. Students lead physical fitness training and mentor subordinates in military, academic and extra-curricular activities. Successful completion of advanced team leadership allows students to progress into ROTC Advanced Courses. Sophomores only	1.00	50	Th 4:00-5:50PM
AS.374.302	01		W	**Leadership and Tactics** *Carroll, Paul* ROTC cadets only Limit 25 Examines the role communications, values, and ethics play in effective leadership through application of principles in tactical scenarios. Emphasis is on improving written and oral communications skills and military tactics proficiency. Coreq: 374.320; Prereq: AS.374.301 in the Fall.	2.00	25	T 2:00-3:50PM
AS.374.302	02		W	**Leadership and Tactics**	2.00		TBA
AS.374.307	01		W	**Leadership in Military History** *Wood, Jeffrey James* Registration restricted to contracted ROTC cadets only.	2.00	20	Th 7:00-8:50AM
AS.374.320	01			**Advanced Tactical Leadership** *Rodriguez, Rolando*	1.00	50	Th 3:00-5:50PM

Military Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Permission required. Juniors only. Permission required. Students further develop their leadership skills by directing and coordinating the efforts of 9-60 personnel on offensive, defensive and civil-support tactical-tasks. Develop written plans for garrison and field environments while supervising its execution. Ultimately, prepares students to excel at the four-week National Leadership Development and Assessment Course at Fort Lewis, WA.			
AS.374.402	01			**Adaptive Leadership/Professionalism** *Carroll, Paul* Coreq: 374.002 ROTC cadets only Limit 20 Study includes practical exercises on establishing an ethical command climate and developing values required of a professional officer. Students apply their leadership skills in the ROTC battalion and prepare for commissioning.	2.00	20	T 5:00-6:50PM
AS.374.407	01			**Being a Platoon Leader** *Carroll, Paul* This course prepares Cadets for actual challenges not necessarily described in text books that junior officers may face in today's Army. Topics include: serving during war, conflict management, ethical dilemmas, time-constrained planning, and change management. This course also serves as pre-requisite for the Basic Officer Leadership Course "B" phase by providing students with reinforced development on: deployment preparation, the military style of writing, supply management, human resources management, family support and operations management. Students will also learn how the Army's organizational structure and administration affects Soldiers across ranks and over time. Finally, students will learn ways to leverage automation to improve their efficiency and effectiveness of records management and developing presentations for superiors.	1.00	20	T 6:00-10:00PM
AS.374.420	01			**Advanced Organizational Planning** *Carroll, Paul* Permission required. Seniors only. Students develop a semester-long progression of training activates that support completion of the unit's Mission Essential Task List. The laboratory builds on the first semester's achievements through advanced problem solving, resource synchronization and executive decision making. Students evaluate and develop subordinate leaders as part of the Leadership Development Program and FM 6-22, Army Leadership. The course serves as the final evaluation and determination on a student's ability to lead Soldier's as a Second Lieutenant in the US Army.	1.00	50	Th 3:00-5:50PM

Music

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.100.317	01	HS	W	**Jewish Music** *Walden, Joshua S* What is "Jewish music," and what roles has it played in global and Jewish cultures? This course will address these questions, considering genres and contexts of Jewish music from cantillation to klezmer and from art music to Yiddish cinema. Cross listed with Jewish Studies	3.00	20	Th 2:00-4:30PM
AS.376.111	01			**Rudiments-Music Theory** *Chiao, Faye* This course introduces written and aural music fundamentals including notation, scales, intervals, chords, rhythm, meter and sight-singing. Students will compose melodies and short pieces and complete listening projects. Course does not count towards the completion of the minor.	3.00	15	MWF 9:00-9:50AM
AS.376.111	02			**Rudiments-Music Theory**	3.00	15	MWF 10:00-10:50AM
AS.376.111	03			**Rudiments-Music Theory** *Staff*	3.00	15	TTh 12:00-1:15PM
AS.376.211	01			**Theory & Musicianship I** *Chiao, Faye* Prereq: Qualifying examination or Rudiments of Music Theory and Musicianship. Limit 15 Introduction to basic principles of tonal music through listening, analysis and music making. Students study melody, harmony, voice leading, figured bass and dissonance treatment, and will also undertake short composition projects.	3.00	15	MWF 11:00-11:50AM
AS.376.211	02			**Theory & Musicianship I** *Hardaway, Travis*	3.00	15	TTh 9:00-10:15AM
AS.376.212	01			**Theory/Musicianship II** *Hardaway, Travis* Prereq: Music Theory and Musicianship I. Limit 15 This course continues the written and aural work of the previous course but focuses on chromatic harmony while continuing the study of melody, counterpoint and figured bass.	3.00	15	TTh 10:30-11:45AM
AS.376.216	01			**Theory III - Counterpoint** *Stone, Stephen C* A study of contrapuntal music, emphasizing composition in both the sixteenth- and eighteenth-century styles as epitomized by Palestrina and Bach.	3.00	15	MWF 1:30-2:20PM
AS.376.231	01	H		**Western Classical Music** *Giarusso, Richard J* Students will learn aural strategies to focus their listening, as well as vocabulary, cultural and historical context for music of the Baroque, Classical, Romantic and 20th century periods. Composers studied will include Bach, Handel, Haydn, Mozart, Beethoven, Schubert, Chopin, Brahms, Debussy, Schoenberg, and Stravinsky.	3.00	20	MW 3:00-3:50PM; F 12:00-12:50PM
AS.376.231	02	H		**Western Classical Music**	3.00	20	MW 3:00-3:50PM; F 1:30-2:20PM
AS.376.231	03	H		**Western Classical Music**	3.00	20	MW 3:00-3:50PM; F 3:00-3:50PM

Music

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.376.258	01			**Jazz Improvisation and Theory** *Norris, Alexander Pope* Study of the theory and practice of Jazz Improvisation. Basic knowledge of music notation skills is required.	3.00	15	Th 1:30-3:50PM
AS.376.341	01	H	W	**Music and Literature: 20th Century Opera** *Giarusso, Richard J* The varied repertoire of 20th-century opera offers a rewarding context for the study of the rich and complex relationship between music and text. In this course, we will study a select group of 20th -century operas and the source texts (plays, short stories, and poems) upon which they are based. We will consider the changes that occur in translating the texts from one genre to the other, along with ways in which each opera influences our understanding of the source, and vice versa. As part of this focused study, we will also gain a broader familiarity with the styles of some of the most important composers of the last century. Major works to be studied include Pelléas et Mélisande (Maeterlinck & Debussy), Wozzeck (Büchner & Berg), Peter Grimes (Crabbe & Britten), Death in Venice (Mann & Britten), and The Tempest (Shakespeare & Adès).	3.00	20	Th 1:30-3:50PM
AS.376.407	01	H	W	**Music and Evolution** *Tolbert, Elizabeth D* This course will examine the bio-cultural evolution of music in light of recent interdisciplinary research on the social bases of human cognitive evolution, and explore its implications for current debates in musicology, ethnomusicology, psychology of music, and human cognitive evolution.	3.00	15	M 1:30-3:50PM

Near Eastern Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.398	01	H	W	**Tombs for the Living** *Deleonardis, Lisa* Centering on the tomb as a unit of analysis, this course examines how death and funerary ritual reflect the cultural values of the living and are an active force in shaping them. Drawing on case studies from Mesoamerica and the Andes we consider various approaches to entombment and funerary ritual.	3.00	25	TTh 3:00-4:45PM
AS.130.126	01	H		**Gods and Monsters in Ancient Egypt** *Jasnow, Richard* Not open to those that have taken AS.130.326, Egyptian Religion and Mythology. The world of Ancient Egypt was populated by a vast array of gods, goddesses, and demons of an amazing variety in nature and form. In this class we will explore that world in the hope of gaining some insight into Egyptian concepts of divinity and of the relationship between humans and deities.	3.00	90	MWF 11:00-11:50AM
AS.130.170	01	H		**Diplomacy and Conflict in the Ancient Middle East** *Lauinger, Jacob* The Middle East is home to the invention of agriculture, cities, and writing. It is also in the Middle East that we find evidence of humanity's earliest diplomatic activity in, for instance, the actual letters sent by ancient kings to one another, the treaties drawn up after their conflicts, and the inscriptions that commemorate their conquests. In this course, we examine texts such as these to explore questions such as: How do we characterize the international system of the ancient Middle East? Does this system change over the approximately two millennia for which we have documentation? Is it better to approach ancient diplomacy through present-day eyes or in the context of ancient world-views? Is an understanding of diplomacy in the ancient Middle East relevant to our understanding of modern international relations? All texts read in translation.	3.00	100	TTh 12:00-1:15PM
AS.130.177	01	HS		**World Prehistory** *Harrower, Michael James* An introduction to the archaeology of pre- and protohistoric cultures in key regions of the world, from the Neolithic revolution to the rise of complex societies. Discussions will focus on how they interacted with their neighbors, how this interaction would have played a part in their development, and the different approaches archaeologists use to understand their interconnections. Regions to be examined include the Near East, the Aegean, East Africa, East Asia, the Andes, and Central America. Cross-listed with Anthropolgy	3.00	80	TTh 9:00-10:15AM
AS.130.212	01	H		**The Archaeology of Death, Burial and The Human Skeleton** *Brinker, Christopher Daniel*	3.00	30	TTh 10:30-11:45AM

Near Eastern Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course will introduce students to the archaeological investigation of past human populations through their mortuary and physical human remains. To this end, major theories and methodologies will be introduced, along with pertinent case studies for discussion.			
AS.130.302	01	H		**History: Ancient Syria-Palestine II** *McCarter, P Kyle, Jr.* A survey of the history of Ancient Syria and Cannan, including ancient Israel. Taught with 134.661 Cross-listed with Jewish Studies	3.00	40	MW 12:00-1:15PM
AS.130.350	01	HS		**N E Archaeology Issues** *Schwartz, Glenn M* Selected problems are reviewed within a time span ranging from the Neolithic to the Hellenistic period. The focus is on the reasons for societal change (and societal stasis), with particular reference to transformations in social organization, economy, and ideology.	3.00	30	TTh 10:30-11:45AM
AS.130.352	01	H		**History of Hasidism** *Katz, David* Although it appears to be a relic of pre-modern Judaism, Hasidism is a phenomenon of the modern era of Jewish history. This course surveys the political and social history of the Hasidic movement over the course of the last three centuries. Students will also explore basic features of Hasidic culture and thought in their historical development. Cross-listed with Jewish Studies	3.00	40	TTh 9:00-10:15AM
AS.130.354	01	HS		**Archaeological Method and Theory** *Harrower, Michael James* What questions do archaeologists ask about the ancient past, how do they collect relevant evidence, and how do they arrive at satisfying answers to their questions? This course will review approaches to method and theory including evolutionary archaeology, culture-historical archaeology, processualist and post-processualist archaeologies, and explores the future of archaeology as a scientific and humanistic discipline. Previous coursework in archaeology or Permission of instructor required. Meets with 131.654	3.00	20	TTh 12:00-1:15PM
AS.130.441	01	H		**Elem Biblical Hebrew** *Simone, Michael R.* Survey of grammar and reading of simple texts. (Credit given only on completion of AS.130.440 and AS.130.441). May not be taken on a satisfactory/unsatisfactory basis.	3.00	20	TBA

Neuroscience

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.020.370	01	N		**Emerging Strategies and Applications in Biomedical Research** *Hattar, Samer* Prereq: 020.305 or 020.306 or 080.305 or 080.306; Juniors and Seniors only. Up-to-date primary literature manuscripts related to new discoveries and new strategies that are allowing scientists to make amazing progress in biomedical research will be presented. Examples include: labeling neurons with up to 90 different colors to trace their circuitry, evolution studies in glowing bacteria, detecting several viruses on a single chip and using fiber optics and channel rhodopsin to induce sleep. Students should be interested in reading primary literature research papers and discussing them in class.	3.00	40	TTh 9:00-10:15AM
AS.050.102	01	NS		**Language and Mind** *Omaki, Akira* Introductory course dealing with theory, methods, and current research topics in the study of language as a component of the mind. What it is to “know” a language: components of linguistic knowledge (phonetics, phonology, morphology, syntax, semantics) and the course of language acquisition. How linguistic knowledge is put to use: language and the brain and inguistic processing in various domains. Cross-listed with Neuroscience and Psychology.	3.00	50	TTh 9:00-10:15AM
AS.050.312	01	NS		**Cognitive Neuroimaging Methods in High-Level Vision** *Park, Soojin* This course is an advanced seminar and research practicum course. It will provide the opportunity to learn about fMRI methods used in the field of vision science and for students to have hands-on experience to develop, design and analyze a research study on topics in the cognitive neuroscience field of high-level vision. In the first part of the course students will read recent fMRI journal papers and learn about common fMRI designs and analysis methods; in the second part of the course students will conduct a research study as a group to address a research question developed from readings. Students are expected to write a paper in a journal article format at the end of the course and to present their results in front of the class. Research topics will vary but with special focus on topics in object, scene and space recognition. Cross-listed with Neuroscience and Psychology. Prereqs. AS.050.204, AS.050.319, AS.050.203,AS.080.203, AS.050.315 or 200.312, or equivalent; instructor's permission required.	3.00	10	T 1:30-4:00PM
AS.050.339	01	NS		**Cognitive Development** *Staff*	3.00	25	MWF 10:00-10:50AM

Neuroscience

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This is a survey course in developmental psychology, designed for individuals with some basic background in psychology or cognitive science, but little or none in development. The course is strongly theoretically oriented, with emphasis on issues of nature, nurture, and development. We will consider theoretical issues in developmental psychology as well as relevant empirical evidence. The principle focus will be early development, i.e., from conception through middle childhood. The course is organized topically, covering biological and prenatal development, perceptual and cognitive development, the nature and development of intelligence, and language learning. Also listed as AS.050.639.Cross-listed with Neuroscience. Instructor's approval required.			
AS.080.105	01	N		**An Introduction to Neuroscience** *Hendry, Stewart H*	3.00	100	MWF 11:00-11:50AM
AS.080.203	01	NS		**Cognitive Neuroscience** *Rapp, Brenda C* This course surveys theory and research concerning how the human brain carries out mental processes. Co-listed as 050.203 in Cognitive Science.	3.00	250	TTh 10:30-11:45AM
AS.080.250	01	NS		**Neuroscience Lab** *Gorman, Linda K* Course will give students the "hands-on" experience of the interdisciplinary nature of neuroscience. Students will use anatomical, behavioral, and neurophysiological techniques to understand the basic underlying principles of neuroscience. Prereqs:(AS.080.305 and AS.080.306) or AS.200.141 or Instructor's Permission. No registration permitted beyond the first class meeting.	3.00	20	T 1:30-4:20PM
AS.080.250	02	NS		**Neuroscience Lab**	3.00	20	W 1:30-4:20PM
AS.080.250	03	NS		**Neuroscience Lab**	3.00	20	Th 1:30-4:20PM
AS.080.250	04	NS		**Neuroscience Lab**	3.00		F 1:30-4:20PM
AS.080.303	01	N		**Structure of the Nervous System** *Hendry, Stewart H* Prereqs. AS.080.305 and AS.080.306 This course takes a structural biological approach to studying the nervous system. In using a systems approach it provides students of cellular-molecular and computational neuroscience with a thorough introduction to functional, microscopic and submicroscopic organization of the brain, spinal cord and peripheral nervous system.	3.00	50	TTh 10:30-11:45AM
AS.080.306	01	N		**The Nervous System II** *Hendry, Stewart H*	3.00	200	TTh 1:30-2:45PM

Neuroscience

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: AS.080.305. The course uses the functional organization of the somatosensory system as a means to examine mechanisms of neutral development. Generation and maturation of neurons, guidance of axons, formation of synapses and the regressive events that shape the adult nervous system will be examined. At the same time we will explore the structure and function of brain regions that allow us to feel pain and temperature, detect vibration, recognize shape and perceive where we are in space. Finally, the single-neuron events that lead to adaptive changes in function will be explored in the context of central nervous system control of movement and of higher order functions of speech and memory.			
AS.080.320	01	N		**The Auditory System** *Boatman, Dana F* Prereqs. AS.080.305 and AS.080.306 This course will cover the neuroanatomy and neurophysiology of the human auditory system from the ear to the brain. Behavioral, electrophysiological, and neuroimaging methods for assessing peripheral and central auditory function will be discussed. Acquired and developmental disorders of auditory function will be reviewed using clinical case studies.	3.00	30	WF 1:30-2:45PM
AS.080.322	01	N		**Cellular and Molecular Biology of Sensation** *Hattar, Samer* Prereqs: AS.080.304 OR AS.080.305 OR AS.080.306 OR AS.020.306 OR AS.020.305 AND Permission of Dr. Hattar (Biology Dept.) Leading scientists in sensory biology from the Johns Hopkins community will present the most current knowledge in the cellular and molecular biology of sensation. A lecture and a student presentation of an exemplar manuscript will be presented each week on a different topic of sensory systems. (CM)	3.00	30	MW 4:00-5:30PM
AS.080.325	01			**Neuroscience Journal Club** *Staff* Open to Neuroscience and Behavioral Biology Sophomores, Juniors and Seniors. Classic Journal Club course where the students will read and discuss and review articles on differing topics depending on student interests. No prerequisites.	1.00	10	TBA

Neuroscience

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.080.330	01	N	W	**Brain Injury & Recovery** *Gorman, Linda K* Prereq: (080.305 & 080.306) or (020.312 and 020.306) or (200.141 and 020.306) or Permission of Instructor. This course investigates numerous types of brain injuries and explores the responses of the nervous system to these injuries. The course's primary focus is the cellular and molecular mechanisms of brain injury and the recovery of function. Discussions of traumatic brain injury, stroke, spinal cord, and tumors, using historical and recent journal articles, will facilitate students' understanding of the current state of the brain injury field. Cross-listed with Psychological and Brain Sciences and Behavioral Biology	3.00	30	WF 10:30-11:45AM
AS.080.352	01	N		**Primate Brain Function** *Hendry, Stewart H* Prereq: 080.305 Neuroscience is approaching the time when it can offer a compelling explanation for how the brain works. This course takes advantage of work done in humans and non-human primates to survey concepts in sensory perception, motor command, and memory mechanisms. Lectures are given by faculty whose research explores these issues. Each subject is explored as a three-lecture sequence: 1) a background lecture that lays out the general principles and over-riding questions of the field; 2) an in-depth lecture that covers the most recent scientific literature; and 3) a summary lecture that brings together the major questions and their Resolution. Cross-listed with Psychological and Brain Sciences	3.00	25	MW 6:00-7:15PM
AS.080.400	01	NS		**Research Practicum: Language Disorders** *Rapp, Brenda C* This course provide the opportunity to learn about adult aphasias; language disorders which are one of the most common consequence of stroke. You will receive training in Supportive Communication Techniques and work as a communication partner with an individual with aphasia for two hours per week. Three class meetings for orientation and reading assignments will be held on campus; training and practicum will be conducted at a local aphasia support center. Transportation required. A valid driver's license for zip car; use of public transportation or van certification for student van driver. Contact Courtney Mansouri at courtney.mansouri@jhu.edu	1.00	2	TBA
AS.080.401	01			**Research Practicum: KEEN (Kids Enjoying Exercise Now)** *Gorman, Linda K*	1.00	10	TBA

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Neuroscience and Behavioral Biology majors only. KEEN (Kids Enjoying Exercise Now) This is a one (1) credit S/U course, organized by the Undergraduate Neuroscience Program Committee. This course provides the opportunity to learn and interact with children who have neurological disabilities, including autism, cerebral palsy and Down syndrome in weekend exercise and recreational activities. You will receive a profile for the KEEN athlete that you will be paired with during a session. You will receive initial training and then volunteer three (3) hours per week for five (5) weeks on consecutive Sundays during the first or second half of the semester. One class meeting for orientation will be held on campus; one exit meeting will be held on campus; practicum will take place at KEEN centers in Maryland. Transportation will be provided.			
AS.080.401	02			**Research Practicum: KEEN (Kids Enjoying Exercise Now)**	1.00	10	TBA
AS.080.401	03			**Research Practicum: KEEN (Kids Enjoying Exercise Now)**	1.00	10	TBA
AS.080.402	01			**Teaching Practicum: Making Neuroscience Fun (MNF)** *Gorman, Linda K* Making Neuroscience Fun (MNF) is a community outreach program which brings age-appropriate interactive presentations about the brain and nervous system to Baltimore City and County elementary school students. MNF is an effort aimed at fostering appreciation for science in general, emphasizing the importance of the brain and the nervous system in everyday life, and enhancing the science curriculum in Baltimore's City and County schools. You will receive initial training and then volunteer four (4) hours per week for four (4) weeks. One class meeting for orientation will be held on campus; one exit meeting will be held on campus; the practicum will take place at Baltimore City and County Schools. Students willing to drive are encouraged to register. Zip Cars will be provided.	1.00	10	M 7:30-11:30AM
AS.080.402	02			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	T 7:30-11:30AM
AS.080.402	03			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	W 7:30-11:30AM
AS.080.402	04			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	Th 7:30-11:30AM
AS.080.402	05			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	F 7:30-11:30AM
AS.080.402	06			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	M 11:30AM-4:00PM
AS.080.402	07			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	T 11:30AM-4:00PM
AS.080.402	08			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	W 11:30AM-4:00PM
AS.080.402	09			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	Th 11:30AM-4:00PM

Neuroscience

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.080.402	10			**Teaching Practicum: Making Neuroscience Fun (MNF)**	1.00	10	F 11:30AM-4:00PM
AS.080.411	01	N		**Adv Sem:Neuroscience** *Baraban, Jay M* Neuroscience BA/MS Students only	3.00	10	TBA
AS.080.412	01	N		**Adv Sem:Neuroscience** *Baraban, Jay M* Department majors BA/MS students only	3.00	10	Th 11:00AM-12:30PM
AS.080.414	01	N		**Adv Sem:Neuroscience** *Baraban, Jay M* Neuroscience BA/MS students only	3.00	10	TBA
AS.200.141	01	NS		**Foundations of Brain, Behavior and Cognition** *Gorman, Linda K* Formerly listed as Introduction to Physiopsychology. A survey of neuropsychology relating the organization of behavior to the integrative action of the nervous system. Cross-listed with Behavioral Biology and Neuroscience.	3.00	250	TTh 9:00-10:15AM
AS.200.304	01	N		**Neuroscience of Decision Making** *Stuphorn, Veit* Prereq: 080.205 or 080.305 or 200.141 - This course will survey the neural mechanisms of decision-making. Current experimental research and theory concerning selection, control, and evaluation of actions are examined in humans and animals. Topics will range from simple perceptual judgements to complex social behavior. The course involves a weekly lecture about a specific topic followed by a student presentation of a current research paper. Cross-listed with Neuroscience	3.00	19	TTh 9:00-10:15AM
AS.200.368	01	NS		**Altered States of Consciousness** *Allen, Richard*	3.00	60	TTh 4:00-5:15PM

Neuroscience

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time

Prereq: Intro Psych and 080.203 or Permission & Signature required. Cross-listed with Neuroscience

Sleep, dreaming, resting and arousal to waking represent very different states of consciousness which differ dramatically both psychologically and physiologically. This course focuses on cognitive, psychological, physiological, biological and genetic aspects characterizing each of these states with some reference to other altered states.

The course includes a focus on the major pathologies affecting sleep-wake states. Clinical cases will be considered. These inform about both psychological and biological aspects of these states. The relative biological functions of each state will be evaluated with particular attention to the mystery of why we have and apparently need REM and NREM sleep. Actual physiological recordings of sleep states will be reviewed and the student will learn how these are obtained and how to evaluate these. The circadian rhythms, ontogeny and evolution of these sleep-wake states will also be covered. This will include a review of information learned from non-human animal sleep. The change from sleep to full awakening reflects change toward increasing brain organization supporting consciousness. Understanding of the neurobiology of these states will be used to explore some of the more modern and scientific concepts of human self-awareness or consciousness.

Philosophy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.150.118	01	HQ		**Introduction to Formal Logic** *Achinstein, Peter* The fundamentals of symbolic logic, including truth-functions, quantification theory, and identity; probability and decision theory.	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.150.118	02	HQ		**Introduction to Formal Logic**	3.00	20	MW 10:00-10:50AM; F 11:00-11:50AM
AS.150.118	03	HQ		**Introduction to Formal Logic**	3.00	20	MW 10:00-10:50AM; F 12:00-12:50PM
AS.150.118	04	HQ		**Introduction to Formal Logic**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.150.202	01	H		**Philosophy of Medicine** *Miller, Bryan Temples* Prerequisite: Must have taken 1 philosophy course or permission required. This course explores philosophical issues that are of central importance to medicine. Topics to be covered include: history of medicine, relationship between medicine and science, distinction between health and disease. Prerequisite: At least one philosophy course or permission from the instructor.	3.00		TTh 1:30-2:45PM
AS.150.205	01	H		**Introduction to the History of Modern Philosophy** *Williams, Michael* An introduction to early modern philosophy, examining Descartes' Meditations on First Philosophy, Locke's Essay Concerning Human Understanding, Hume's Enquiry Concerning Human Understanding, and selections from Kant's Critique of Pure Reason. We will consider such topics as the relation between philosophy and science, the nature and scope of human knowledge, the nature of the human mind, and the nature of human freedom. Gilman course in the Humanities.	3.00	35	MW 11:00-11:50AM; F 12:00-12:50PM
AS.150.205	02	H		**Intro Hist of Mod Philos**	3.00	35	F 12:00-12:50PM; MW 11:00-11:50AM
AS.150.205	03	H		**Intro Hist of Mod Philos**	3.00	35	F 10:00-10:50AM; MW 11:00-11:50AM
AS.150.205	04	H		**Intro Hist of Mod Philos**	3.00	35	MW 11:00-11:50AM; F 1:30-2:20PM
AS.150.220	01	H		**Introduction to Moral Philosophy** *Theunissen, L Nandi* The class serves as an introduction to ethics. We consider select topics in meta-ethics (on the nature of reason and value), and we survey three prominent theories within normative ethics (utilitarianism, Kant's moral theory, and virtue theory). We will read classic works from the history of philosophy, and important contemporary papers.	3.00	20	MW 12:00-12:50PM; F 1:30-2:20PM
AS.150.220	02	H		**Introduction to Moral Philosophy**	3.00	20	MW 12:00-12:50PM; W 3:00-3:50PM
AS.150.220	03	H		**Introduction to Moral Philosophy**	3.00	20	MW 12:00-12:50PM; W 4:00-4:50PM
AS.150.220	04	H		**Introduction to Moral Philosophy**	3.00	20	MW 12:00-12:50PM; F 1:30-2:20PM
AS.150.220	05	H		**Introduction to Moral Philosophy**	3.00	20	MW 12:00-12:50PM; F 1:30-2:20PM
AS.150.220	06	H		**Introduction to Moral Philosophy**	3.00	20	MW 12:00-12:50PM; W 3:00-3:50PM
AS.150.220	07	H		**Introduction to Moral Philosophy**	3.00	15	MW 12:00-12:50PM; W 4:00-5:00PM

Philosophy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.150.245	01	H		**Introduction to Philosophy of Mind** *Williams, Meredith* This is an introduction to the central problems of philosophy of mind: the mind-body problem and the problem of self-knowledge. Of particular interest in contemporary work is the relation of mind and brain and whether, or how, we acquire self-knowledge.	3.00	20	MW 9:00-9:50AM; F 11:00-11:50AM
AS.150.245	02	H		**Introduction to Philosophy of Mind**	3.00	20	F 11:00-11:50AM; MW 9:00-9:50AM
AS.150.245	03	H		**Introduction to Philosophy of Mind**	3.00	20	F 9:00-9:50AM; MW 9:00-9:50AM
AS.150.245	04	H		**Introduction to Philosophy of Mind**	3.00	20	F 10:00-10:50AM; MW 9:00-9:50AM
AS.150.300	01	H		**Prometheus Editorial Workshop** *Koll, Sandy Gillian* Prometheus is an international undergraduate philosophy journal published by students at Johns Hopkins University. The purpose of the journal is to promote philosophic discourse of the highest standard by offering students an opportunity to engage in open discussion, participate in the production and publication of an academic journal, and establish a community of aspiring philosophers. Students enrolled in this workshop will act as the staff readers for the journal. For more information, please visit www.prometheus-journal.com.	1.00	20	W 7:00-8:00PM
AS.150.311	01	H		**Undergraduate Seminar: Philosophy of Ludwig Wittgenstein** *Williams, Meredith* We will read Wittgenstein's two great works: Tractatus Logico-Philosophicus (1921) and Philosophical Investigations (1953). If you have previously taken AS.150.442 you may not register for AS.150.311.	3.00	15	T 1:30-4:00PM
AS.150.400	01	HS		**Realism & Antirealism in the Philosophy of Science** *Hricko, Jonathon Daniel* Are our best scientific theories approximately true, or useful but false? Does science converge on the truth over time? This course addresses such questions by surveying the scientific realism debate.	3.00	20	MWF 11:00-11:50AM
AS.150.401	01	H	W	**Greek Philosophy: Plato and His Predecessors** *Bett, Richard* A study of pre-Socratic philosophers, especially those to whom Plato reacted; also an examination of major dialogues of Plato with emphasis upon his principal theses and characteristic methods. Cross-listed with Classics	3.00	20	TTh 10:30-11:45AM
AS.150.419	01	H		**Kant'S Critique/Judgment** *Forster, Eckart*	3.00	15	TTh 9:00-10:15AM

Philosophy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.150.424	01	HQ		**Foundations of Probability & Induction** *Achinstein, Peter* An examination of various interpretations of probability, including classical and priori, frequency, propensity, subjective, and logical. Also, we will study views about evidence as well as paradoxes of inductive reasoning, including Hume's skepticism, and the grue and ravens paradoxes. No previous knowledge of probability is required.	3.00	15	MW 1:30-2:45PM
AS.150.429	01	H		**Topics in Logic: Platonism & Anti-Platonism in the Foundations of Mathematics** *Rynasiewicz, Robert* We will explore whether or not such abstract objects as numbers, sets, functions, and mathematical structures exist per se and, if so, how we can know about them. We will pay special attention to the thesis that there is no fact of the matter as to whether abstract objects exist per se. Prerequisites: 150.420 or equivalent.	3.00	15	TTh 10:30-11:45AM
AS.150.474	01	H		**Justice and Health** *Bok, Hilary* Course will consider the bearing of theories of justice on health care. Topics will include national health insurance, rationing and cost containment, and what justice requires of researchers in developing countries.	3.00	15	T 1:30-3:50PM
AS.150.476	01	H	W	**Philosophy and Cognitive Science** *Gross, Steven* What is meant when it's claimed that something is or isn't innate? Is the notion of innateness scientifically legitimate? What is the logic of the arguments made for and against specific innateness claims? In what ways does research in linguistics, developmental psychology, developmental (cognitive) neuroscience, genetics, etc. shed light on innateness? Which, if any, features-especially psychological features-of humans are innate? Are aspects of language innate? Are aspects of moral judgement innate? Are there innate concepts? What was at issue in various historically important discussions about innateness (e.g., Plato's Meno, Locke vs. Leibniz)?	3.00	20	TTh 12:00-1:15PM
AS.150.488	01	H	W	**Enlightenment Moral and Political Theory** *Bok, Hilary*	3.00	15	Th 1:30-3:50PM
AS.150.495	01	HS	W	**Sex, Drugs, and Bioethics: Medicine and Morality in Modern America** *O'Connor, Daniel*	3.00	15	F 1:30-3:50PM

Philosophy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Alongside rock n' roll, sex and drugs have classically been seen as sites of moral or ethical transgression, particularly in post-war America. Unlike rock n' roll, however, sex and drugs have always been bound up with the practice of medicine. This course explores the interaction of medical science with the moral and ethical issues which surround i) reproduction, sexual pleasure, and gender roles and ii) the use of drugs, both therapeutic, enhancing and recreational. Bridging these two sides of the course is the question of medicalisation, and how medical science is used to construct socially normative ideals about sexuality, behavior, emotion and physical capacity, and how in turn those moral norms are used to justify or argue for the development of particular medical practices. The aim of the course is to illuminate the mutually constitutive interplay of medicine and morality in modern America.Topics covered include: abortion, contraception, IVF, sex-selection, gene selection, adolescent sexualities, prostitution, STD surveillance, medicalisation of sexual dysfunction, medicalisation of emotion and behavior, 'moral enhancement', ADHD, Performance Enhancing Drugs, cosmetic surgery, neuroenhancement, recreational drugs, the war on drugs, the purpose of medicine.			
AS.213.368	01	H		**German Political Thought** *Tobias, Rochelle* This course will introduce students to major figures in German political thought from Martin Luther to Karl Marx and Immanuel Kant to Carl Schmitt. The class will explore such issues as the notion of sovereignty, the relationship between church and state, the theory of parliamentary democracy, and the political and economic ramifications of liberalism. Reading and discussion in English.	3.00	25	TTh 10:30-11:45AM
AS.225.328	01	H	W	**The Existential Drama: Philosophy and Theatre of the Absurd** *Martin, Joseph H* Existentialism, a powerful movement in modern drama and theatre, has had a profound influence on contemporary political thought, ethics, and psychology, and has transformed our very notion of how to stage a play. Selected readings and lectures on the philosophy of Kierkegaard, Nietszche, Camus and Sartre -- and discussion of works for the stage by Sartre, Ionesco, Genet, Beckett, Albee, Pinter, Athol Fugard (with Nkani & Nshone), Heiner Müller and the late plays of Caryl Churchill. Opportunities for projects on Dürrenmatt, Frisch, Havel, Witkiewicz, and Mrozek.	3.00	15	M 3:00-5:30PM
AS.300.336	01	H		**Jewish Tradition and Philosophical Modernity: Buber, Rosenzweig, Levinas** *Buijs, Martijn*	3.00	15	MW 12:00-1:15PM

Philosophy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time

All readings in English.
Three Jewish thinkers of the twentieth century – Martin Buber, Franz Rosenzweig, and Emmanuel Levinas – propagate a radically new kind of philosophy. This philosophy strongly rejects both Idealism and materialism, and brings into sharp focus themes of temporality and finitude, of otherness and openness; and it does so precisely in articulating a new relationship to the religious.

All three of these authors are first and foremost philosophers – builders of abstract and universal systems of meaning. They are also tied intimately, precisely as thinkers, to the Jewish tradition, which feeds and supports their radically innovative philosophical pursuits. This course will examine the way philosophical modernity – often seen as anti-religious – and religious tradition – accused of stifling conservatism – in fact form a curious yet potent alliance in the work of these three.

We will investigate these authors in relation to a range of Jewish sources from different ages and different genres – from Biblical tales and Talmudic discussions, through Midrashic interpretations and Rashi's commentaries, to the philosophy of Maimonides and, last but not least, the poetry of Yehuda Halevi. The goal of the course is to see how some of the classical texts of Jewish tradition shape, and are in turn shaped by, such philosophies, and to thus examine how the universality of reason and Jewish particularism are able to interact.

Physics & Astronomy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.171.101	01	EN		**Gen Phys:Phys Sci Maj I** *Neufeld, David A* Coreq: 110.108-109,173.111-112 This two-semester sequence in general physics covers mechanics, heat, sound, electricity and magnetism, optics, and atomic physics. Midterm exams for every section are given during the 8 AM section time! Accordingly, students registering for sections at times other than 8 AM must retain availability for 8 AM sections as needed.	4.00	24	MWF 11:00-11:50AM; Th 8:00-8:50AM
AS.171.101	02	EN		**Gen Phys:Phys Sci Maj I**	4.00	24	MWF 11:00-11:50AM; Th 8:00-8:50AM
AS.171.101	03	EN		**Gen Phys:Phys Sci Maj I**	4.00	24	MWF 11:00-11:50AM; Th 8:00-8:50AM
AS.171.101	04	EN		**Gen Phys:Phys Sci Maj I**	4.00	24	MWF 11:00-11:50AM; Th 8:00AM-8:50PM
AS.171.101	05	EN		**Gen Phys:Phys Sci Maj I**	4.00	24	MWF 11:00-11:50AM; Th 8:00-8:50AM
AS.171.102	01	EN		**General Physics II** *Broholm, Collin* Prereq: Grade of C- or better in 171.101 or 171.103 Coreq: 110.109,173.112 This two-semester sequence in general physics covers mechanics, heat, sound, electricity and magnetism, optics, and atomic physics. Midterm exams for every section are given during the 8 AM section time! Accordingly, students registering for sections at times other than 8 AM must retain availability for 8 AM sections as needed	4.00	24	F 8:00-8:50AM; TTh 9:00-10:15AM
AS.171.102	02	EN		**General Physics II**	4.00	24	F 8:00-8:50AM; TTh 9:00-10:15AM
AS.171.102	03	EN		**General Physics II**	4.00	24	F 10:00-10:50AM; TTh 9:00-10:15AM
AS.171.102	04	EN		**General Physics II**	4.00	24	F 11:00-11:50AM; TTh 9:00-10:15AM
AS.171.102	05	EN		**General Physics II**	4.00	24	F 12:00-12:50PM; TTh 9:00-10:15AM
AS.171.102	06	EN		**General Physics II**	4.00	24	F 8:00-8:50AM; TTh 9:00-10:15AM
AS.171.102	07	EN		**General Physics II**	4.00	24	F 8:00-8:50AM; TTh 10:30-11:45AM
AS.171.102	08	EN		**General Physics II**	4.00	24	F 8:00-8:50AM; TTh 10:30-11:45AM
AS.171.102	09	EN		**General Physics II**	4.00	24	F 9:00-9:50AM; TTh 10:30-11:45AM
AS.171.102	10	EN		**General Physics II**	4.00	24	F 9:00-9:50AM; TTh 10:30-11:45AM
AS.171.102	11	EN		**General Physics II**	4.00	24	F 9:00-9:50AM; TTh 10:30-11:45AM
AS.171.102	12	EN		**General Physics II**	4.00	24	F 10:00-10:50AM; TTh 10:30-11:45AM
AS.171.102	13	EN		**General Physics II**	4.00	24	F 11:00-11:50AM; TTh 10:30-11:45AM
AS.171.102	14	EN		**General Physics II**	4.00	24	F 11:00-11:50AM; TTh 10:30-11:45AM
AS.171.102	15	EN		**General Physics II**	4.00	24	F 12:00-12:50PM; TTh 10:30-11:45AM
AS.171.104	01	EN		**Gen Phys/Biol Majors II** *Heckman, Timothy Martin* Prereq: Grade of C- or better in 171.101 or 171.103 Coreq: 110.109,173.112 This two-semester sequence is designed to present a standard calculus-based physics preparation tailored to students majoring in one of the biological sciences. Topics in modern physics and in fluid dynamics will be covered in this course. Midterm exams for every section are given during the 8 AM section time! Accordingly, students registering for sections at times other than 8 AM must retain availability for 8 AM sections as needed.	4.00	24	MWF 9:00-9:50AM; T 8:00-8:50AM
AS.171.104	02	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 9:00-9:50AM

Physics & Astronomy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.171.104	03	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 9:00-9:50AM
AS.171.104	04	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 10:30-11:20AM
AS.171.104	05	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 10:30-11:20AM
AS.171.104	06	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 10:30-11:20AM
AS.171.104	07	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 12:00-12:50PM
AS.171.104	08	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 12:00-12:50PM
AS.171.104	09	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 12:00-12:50PM
AS.171.104	10	EN		**Gen Phys/Biol Majors II**	4.00	24	MWF 9:00-9:50AM; T 4:30-5:20PM
AS.171.106	01	EN		**Electricity and Magnetism I** *Maksimovic, Petar* Prereq: Grade of C- or better in 171.105; Co-req: 173.116, 110.109 Classical electricity and magnetism with fewer topics than 171.101-103, but with greater mathematical sophistication. Particularly recommended for students who plan to take 171.201-202 or 171.209-210.	4.00	15	MWF 11:00-11:50AM; Th 10:30-11:20PM
AS.171.106	02	EN		**Electricity and Magnetism I**	4.00	15	MWF 11:00-11:50AM; Th 10:30-11:20AM
AS.171.118	01	N		**Stars and the Universe: Cosmic Evolution** *Riess, Adam* Evolution of the universe: from origin in a cosmic explosion to emergence of life on Earth and possibly other planets throughout the universe.	3.00	340	MW 1:30-2:45PM
AS.171.202	01	N		**Modern Physics** *Markovic, Nina* Course completes four-semester introductory sequence that includes 171.105-106 and 171.201. Planck's hypothesis, de Broglie waves, Bohr atom, Schrodinger equation in one dimension, hydrogen atom, Pauli exclusion principle, conductors and semiconductors, nuclear physics, particle physics.	4.00	35	MWF 11:00-11:50AM; T 1:30-2:20PM
AS.171.204	01	N		**Classical Mechanics II** *Blumenfeld, Barry J* Prereq: 110.108-109, 171.201 Principles of Newtonian and Lagrangian mechanics; application to central-force motion, rigid body motion, and the theory of small oscillations.	4.00	35	MWF 9:00-9:50AM; Th 1:30-2:20PM
AS.171.304	01	N		**Quantum Mechanics II** *Kovesi-Domokos, Susan* Prereq: 171.303, 171.202, 171.204, 110.202 Fundamental aspects of quantum mechanics. Uncertainty relations, Schrodinger equation in one and three dimensions, tunneling, harmonic oscillator, angular momentum, hydrogen atom, spin, Pauli principle, perturbation theory, transition probabilities and selection rules, atomic structure, scattering theory.	4.00	30	MWF 9:00-9:50AM; T 1:30-2:20PM

Physics & Astronomy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.171.310	01	N		**Biological Physics** *Leheny, Robert L* Prereq: 110.109, 171.101-102 or 171.103-104 or 171.105-106 Introduces topics of classical statistical mechanics. Additional topics include low-Reynolds number hydrodynamics and E&M of ionic solutions, via biologically relevant examples.	4.00	35	MWF 11:00-11:50AM; Th 1:30-2:20PM
AS.171.411	01	N		**Light and Optics** *Menard, Brice* Prerequisites: either 171.102, 171.104, or 171.106 What is light? How does it propagate and interact with matter? How can we use it to transmit information? This course is designed for majors in physics as well as other science and engineering departments.	3.00	25	TTh 1:30-2:45PM
AS.173.111	01	N		**General Physics Lab I** *Swartz, Morris* Coreq: 171.101, 171.103, or 171.105 Experiments are chosen from both physical and biological sciences and are designed to give students background in experimental techniques as well as to reinforce physical principles.	1.00	24	T 1:30-4:20PM
AS.173.111	02	N		**General Physics Lab I**	1.00	24	W 1:30-4:20PM
AS.173.111	03	N		**General Physics Lab I**	1.00	24	Th 1:30-4:20PM
AS.173.111	04	N		**General Physics Lab I**	1.00	24	T 1:30-4:20PM
AS.173.111	05	N		**General Physics Lab I**	1.00	24	W 1:30-4:20PM
AS.173.112	01	N		**General Physics Lab II** *Swartz, Morris* Prereq: 173.111; Coreq: 171.102 or 171.104 or 171.106 Experiments are chosen from both physical and biological sciences and are designed to give students background in experimental techniques as well as to reinforce physical principles.	1.00	24	M 1:30-4:20PM
AS.173.112	02	N		**General Physics Lab II**	1.00	24	M 1:30-4:20PM
AS.173.112	03	N		**General Physics Lab II**	1.00	24	M 1:30-4:20PM
AS.173.112	04	N		**General Physics Lab II**	1.00	24	T 1:30-4:20PM
AS.173.112	05	N		**General Physics Lab II**	1.00	24	T 1:30-4:20PM
AS.173.112	06	N		**General Physics Lab II**	1.00	24	T 1:30-4:20PM
AS.173.112	07	N		**General Physics Lab II**	1.00	24	W 1:30-4:20PM
AS.173.112	08	N		**General Physics Lab II**	1.00	24	W 1:30-4:20PM
AS.173.112	09	N		**General Physics Lab II**	1.00	24	W 1:30-4:20PM
AS.173.112	10	N		**General Physics Lab II**	1.00	24	Th 1:30-4:20PM
AS.173.112	11	N		**General Physics Lab II**	1.00	24	Th 1:30-4:20PM
AS.173.112	12	N		**General Physics Lab II**	1.00	24	Th 1:30-4:20PM
AS.173.112	13	N		**General Physics Lab II**	1.00	24	Th 9:00-11:50AM
AS.173.112	14	N		**General Physics Lab II**	1.00	24	M 6:00-8:50PM
AS.173.112	15	N		**General Physics Lab II**	1.00	24	M 6:00-8:50PM
AS.173.112	16	N		**General Physics Lab II**	1.00	24	T 6:00-8:50PM
AS.173.112	17	N		**General Physics Lab II**	1.00	24	T 6:00-8:50PM
AS.173.112	18	N		**General Physics Lab II**	1.00	24	T 6:00-8:50PM
AS.173.112	19	N		**General Physics Lab II**	1.00	24	W 6:00-8:50PM

Physics & Astronomy

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.173.112	20	N		**General Physics Lab II**	1.00	24	W 6:00-8:50PM
AS.173.112	21	N		**General Physics Lab II**	1.00	24	W 6:00-8:50PM
AS.173.112	22	N		**General Physics Lab II**	1.00	24	Th 6:00-8:50PM
AS.173.112	23	N		**General Physics Lab II**	1.00	24	Th 6:00-8:50PM
AS.173.116	01	N		**Electricity and Magnetism Laboratory** *Swartz, Morris* Experiments chosen to complement Electricity and Magnetism 171.106 and introduce students to experimental techniques and statistical analysis	1.00	30	M 6:00-8:50PM
AS.173.308	01	N	W	**Advanced Physics Lab** *Marriage, Tobias* A broad exposure to modern laboratory procedures such as holography, chaos, and atomic, molecular, and particle physics.	3.00	20	M 1:30-4:20PM
AS.173.308	02	N	W	**Advanced Physics Lab**	3.00	20	M 10:00AM-12:50PM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.327	01	H	W	**The Harem and the Veil: Space and Gender in the Islamic World** *Brown, Rebecca Mary* This course explores the constructed imagery of the harem and the veil in relation to politics and visual culture in the Middle East, North Africa, India, and Euro-America. Topics will include: Ottoman palace architecture, Orientalist painting, mandating/banning the veil, Islamic feminisms. We will address visual culture broadly, including advertising, architecture, contemporary art, film, news media.	3.00	15	T 3:00-5:30PM
AS.190.102	01	S		**Intro To Comp Politics** *Jabko, Nicolas* An introduction to the comparative study of political regimes, institutions and processes, with illustrations drawn from selected countries in different world regions. These may include Great Britain, Germany, Japan, Mexico, China, India, Iran, Nigeria, and Russia, or others. (CP)	3.00	20	MW 11:00-11:50AM; F 11:00-11:50AM
AS.190.102	02	S		**Intro To Comp Politics**	3.00	20	MW 11:00-11:50AM; F 11:00-11:50AM
AS.190.102	03	S		**Intro To Comp Politics**	3.00	20	F 11:00-11:50AM; MW 11:00-11:50AM
AS.190.102	04	S		**Intro To Comp Politics**	3.00	20	F 11:00-11:50AM; MW 11:00-11:50AM
AS.190.102	05	S		**Intro To Comp Politics**	3.00	20	MW 11:00-11:50AM; Th 3:00-3:50PM
AS.190.102	06	S		**Intro To Comp Politics**	3.00	20	MW 11:00-11:50AM; Th 3:00-3:50PM
AS.190.102	07	S		**Intro To Comp Politics**	3.00	20	W 3:00-3:50PM; MW 11:00-11:50AM
AS.190.102	08	S		**Intro To Comp Politics**	3.00	20	W 3:00-3:50PM; MW 11:00-11:50AM
AS.190.210	01	S		**The American Congress** *Schlozman, Daniel* An introduction to legislative politics and policymaking in the US, and their place in the political system. Special attention to issues of representation, and the consequences of institutional design.	3.00	20	TTh 1:30-2:20PM; F 1:30-2:20PM
AS.190.210	02	S		**The American Congress**	3.00	20	TTh 1:30-2:20PM; F 3:00-3:50PM
AS.190.226	01	S		**Global Governance** *Allan, Bentley* Global problems like poverty, financial instability, human rights abuses, and climate change threaten both international order and human well-being. In the absence of a world state, these problems must be addressed by an increasingly complex, transnational network of organizations and social groups. First, we will aim to understand and explain how global problems are governed through detailed case studies of International Organizations and Non-Governmental Organizations such as the United Nations, World Bank, Intergovernmental Panel on Climate Change, Amnesty International and more. Second, we will critically evaluate the successes and failures of these organizations and explore the possibilities for improving democratic governance at the global level.	3.00	40	TTh 9:00-10:15AM
AS.190.265	01	S		**Comparative Political Behavior** *Katz, Richard Stephen*	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				An introduction to the study of political behavior, emphasizing electoral behavior in democratic countries. (CP)			
AS.190.265	02	S		**Comparative Political Behavior**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.190.265	03	S		**Comparative Political Behavior**	3.00	20	MW 10:00-10:50AM; Th 4:00-4:50PM
AS.190.265	04	S		**Comparative Political Behavior**	3.00	20	MW 10:00-10:50AM; Th 4:00-4:50PM
AS.190.280	01	S		**Political Persuasion (Classics of Political Thought I)** *Bennett, Jane* An introduction to Euro-American political thought through a close examination of six thinkers: Socrates, Machiavelli, Locke, Marx, Whitman, and Foucault.	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.190.280	02	S		**Political Persuasion (Classics of Political Thought I)**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.190.280	03	S		**Political Persuasion (Classics of Political Thought I)**	3.00	20	MW 10:00-10:50AM; Th 3:00-3:50PM
AS.190.280	04	S		**Political Persuasion (Classics of Political Thought I)**	3.00	20	MW 10:00-10:50AM; Th 3:00-3:50PM
AS.190.301	01	S		**Global Political Economy** *Marlin-Bennett, Renee* Prereq: CIP (190.309) Examines the intersection of politics and economics in global affairs. Focuses on theoretical approaches to global political economy; institutions of governance of the global political economy; flows of goods, services, capital, and information; and transborder problems.	3.00		MW 3:00-3:50PM; F 4:00-4:50PM
AS.190.301	02	S		**Global Political Economy**	3.00		MW 3:00-3:50PM; F 3:00-3:50PM
AS.190.329	01	S		**Nat Security-Nuclear Age** *David, Steven R* This course examines the impact of weapons of mass destruction on international politics with an emphasis on security issues. The first half of the course focuses on the history of nuclear weapons development during the Cold War and theories of deterrence. The second half of the class considers contemporary issues including terrorism, chemical and biological weapons, ballistic missile defense and proliferation. Requirements include a midterm, final and a ten page paper.	3.00	25	TTh 3:00-4:15PM
AS.190.330	01	S		**Japanese Politics** *Chung, Erin* This course introduces students to the major debates and issues of postwar Japanese politics. Topics include nationalism, electoral politics, civil society, and immigration.	3.00	20	MW 1:30-2:20PM; F 1:30-2:20PM
AS.190.330	02	S		**Japanese Politics**	3.00	20	MW 1:30-2:20PM; F 3:00-3:50PM
AS.190.354	01	S		**Politics of Health Policy** *Longman, Phillip* Traces the evolution of the American Health care system, emphasis on the political forces that shape public and private provision of health care in the United States. Cross-listed with Public Health	3.00	15	Th 3:00-5:30PM
AS.190.368	01	S		**Pluralism** *Chambers, Samuel Allen*	3.00		T 1:30-3:50PM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Previous course in political theory or permission of instructor This seminar will explore the theory and politics of pluralism: from European debates over religious tolerance to American debates over constitutional founding; from liberal political philosophy to radical democracy. Authors may include Bentley, Dahl, Locke, Madison, Ranciere, Rawls, Young			
AS.190.395	01	S		**Crime and Society** *Ginsberg, Benjamin* Contrary to the image most Americans have of their country, the United States is a tough nation with respect to crime. The U.S. has constructed a considerably more harsh criminal justice regime than any of its advanced industrial counterparts. In recent years, America's prisons and jails have held more than one percent of the nation's adults--2.3 million people–with many more on parole, probation or temporarily free on bail awaiting trial. In Western Europe, by contrast, fewer than two-tenths of one percent of the adult populace is behind bars. This enormous discrepancy in incarceration rates is more a function of the relative severity of America's criminal laws than differences between Europe and the U.S. in the actual incidence of serious crime. And, of course, while Western European nations no longer execute convicted criminals, the U.S. remains committed to the use of capital punishment. We will explore these and related issues of crime and punishment in the U.S.	3.00	25	W 1:30-3:50PM
AS.190.396	01	S	W	**Capitalism and Ecology** *Connolly, William E* Prereqs: 190.280 or 190.281 or 190.282 This is a discussion seminar. A previous course in theory or permission of instructor is needed. The class will explore diverse theories of capitalism advanced by theorists such as Marx, Hayek, Hirsch, Polanyi and Deleuze/Guattari in relation to recent work in complexity theory on evolution, climate, ocean currents, and beyond. Texts by Jane Bennett, Connolly, Stuart Kauffman, Fred Pearce and Clive Hamilton (Requiem for a Species) will be consulted on these latter issues. The course involves student presentations, class discussions, and two essays.	3.00	15	M 1:30-3:50PM
AS.190.406	01	S		**The Executive Branch** *Ginsberg, Benjamin* In the 19th Century America was noted for its courts, political parties and representative institutions. Today, America's political parties and representative institutions have declined in importance while the institutions of the executive branch have increased in importance. This seminar will examine the nation's key executive institutions and aspects of executive governance in the U.S. Students will alternate primary responsibility for week's readings. Every student will prepare a 10-15 page review and critique of the book(s0 for which they are responsible in class.	3.00	25	M 1:30-3:50PM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.190.413	01	S		**Global Security Politics** *Deudney, Daniel Horace* An intensive examination of the security politics of nuclear weapons, outer space, biological weapons, and emerging information technologies.	3.00	20	MW 1:30-2:20PM; F 1:30-2:20PM
AS.190.413	02	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; F 1:30-2:20PM
AS.190.413	03	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; F 1:30-2:20PM
AS.190.413	04	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; F 1:30-2:20PM
AS.190.413	05	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; Th 3:00-3:50PM
AS.190.413	06	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; Th 3:00-3:50PM
AS.190.413	07	S		**Global Security Politics**	3.00	20	F 3:00-3:50PM; MW 1:30-2:20PM
AS.190.413	08	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; F 3:00-3:50PM
AS.190.413	09	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; W 3:00-3:50PM
AS.190.413	10	S		**Global Security Politics**	3.00	20	MW 1:30-2:20PM; F 10:00-10:50AM
AS.190.419	01	S	W	**Identity and Nations in Latin American Politics** *Keck, Margaret E* This seminar class explores formation and political mobilization of identies - group, ethnic, gendered, national, cosmopolitan - in Latin America. Although some of the reading will be broadly comparative, the spring 2013 version of the class will focus especially on Brazil. Requirements will include short response papers and a term paper. Portuguese or Spanish desirable but not required. Enrolled students must be juniors or seniors and must have taken at least one prior course in comparative politics.	3.00	20	T 3:00-5:20PM
AS.190.424	01	S	W	**Policy Disasters** *Teles, Steven Michael*	3.00	25	Th 1:30-3:50PM
AS.190.479	01	S		**Imag(in)ing Cities** *Spence, Lester*	3.00	25	M 3:00-5:50PM
AS.190.499	01	S	W	**Senior Thesis:Ir/Pol Sci** *Staff* Seniors also have the opportunity to write a senior research thesis. To be eligible to write this thesis, students must identify a faculty sponsor who will supervise the project. Once a faculty sponsor has approved a topic, students must enroll in a three credit independent study during the fall semester of their senior year. At the end of the fall semester, if the faculty sponsor determines that adequate progress has been made and the project warrants further work, the student may enroll in the senior thesis (190.499) which will be worth 6 credits.	6.00	40	TBA

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.191.304	01	S		**US-Cuba Decision Making** *Smith, Wayne* This course is a history of U.S.-Cuban relations since the Castro regime took power in 1959 and an effort to understand why the U.S. has not been able to deal successfully or even rationally with the government there even with the end of the Cold War. At this point, the U.S. is the only nation in the Western Hemisphere not to have full diplomatic and trade relations with the island. Why is that?	3.00	35	W 1:30-3:50PM
AS.191.313	01	S		**The Worlds of Globalization** *Kamola, Isaac* The language of "globalization" is now widely used to describe the modern world—a world that is increasingly interconnected, economically homogenous, and culturally convergent. Even political and economic alternatives are commonly framed in terms of forging other "global" formations, be they justice globalism, grassroots globalization, or globalization from below. This class examines how the concept of globalization emerged as the definitive term for conceptualizing the modern world, debates the usefulness of this concept, and identifies alternative ways of conceptualizing the world as a social totality. In this class we look at four particular discourses of globalization—those of global cities, global activism, global capitalism, and global culture—while examining historical and contemporary alternatives to these discourses. The final project will use these theoretical tools to critically examine the city of Baltimore.	3.00	25	W 5:00-7:30PM
AS.191.326	01	S	W	**Sex, Gender and War** *Wilcox, Lauren* In this course we will explore what different perspectives on sex and gender from feminist theory and the social sciences have to contribute to the understanding of key questions about the nature of war. Topics covered include nuclear politics, the concept of a just war, terrorism and the War on Terror, and humanitarian wars. This is a discussion seminar involving approximately 20 pages of writing. It also presupposes prior work in International Relations.	3.00	25	TTh 10:30-11:45AM
AS.191.332	01	S		**Civilians in the Path Of War** *Abrahms, Max* In this course, we will examine ideas about violence in international affairs by both states and non-state actors. More specifically, we will investigate some of the conditions that give rise to conflict in the international system, the range of actors engaged in violence, their diverse motives, and the strategies of governments and the international system to mitigate conflict.	3.00	30	Th 3:00-5:30PM
AS.191.347	01	S		**U.S.-Chinese Relations** *Leon, Pak Yue*	3.00	35	MW 3:00-4:15PM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course examines key issues in U.S. -Chinese relations. We will take an in-depth look at the politics, policies, and topics surrounding strategic balancing, trade, energy, nuclear proliferation on the Korean Peninsula, relations across the Taiwan Strait, China's rise and the response of the United States and its allies. We will place the relationship between the United States and China in the context of its geopolitical implications not only for the two countries but also for the international system.			
AS.191.348	01	S	W	**Domestic Politics of Contemporary China** *Leon, Pak Yue* This course examines salient issues in the domestic politics of contemporary China. It begins with a brief historical overview of China¹s developments that led to the revolutions of 1911 and 1949, as well as the Cultural Revolution. The main part of the course will explore the era of economic reform and opening that began in the late 1970s and that still continues today. Topics include the relationship between business and politics, obstacles to economic and political reforms, the interplay between foreign relations and domestic politics, institutional and bureaucratic sources of policy-making, the social and political impact of economic growth, the relationship between central and provincial governments, and the questions of political opening and leadership transitions.	3.00	19	MW 9:00-10:15AM
AS.191.367	01	S	W	**US Environmental Policy** *Greear, Jake* This course provides an intensive introduction to the emergence, development, and functioning of key environmental policies in the United States.	3.00	25	MW 3:00-4:15PM
AS.191.392	01	S		**Ancient and Medieval Political Philosophy** *Gray, Stuart* This discussion-intensive seminar carefully examines major texts and thinkers in the ancient and medieval periods. We will read works by Homer, Hesiod, Thucydides, Plato, Aristotle, Cicero, St. Augustine, as well as the Islamic political thought of the Qur'an and Alfarabi.	3.00	25	TTh 1:30-2:45PM
AS.191.395	01	S		**Law and Religion** *Merriam, Jesse Ram*	3.00	25	TTh 1:30-2:45PM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				The First Amendment to the U.S. Constitution contains the Establishment Clause, which prohibits the government from promoting religion, and the Free Exercise Clause, which guarantees religious liberty. Together, these are known as the Religion Clauses, and they have been at the center of some of the Supreme Court's most controversial decisions, such as school prayer, state funding for religious schools, and the placement of religious displays on public property. Many scholars, judges, and politicians have proclaimed that the Court's church-state decisions are "incoherent" and even "contradictory." This course will examine these criticisms of the Court's church-state jurisprudence and explore whether any consistent principles underlie this area of the law. Is there a basis on which "separationists," who advocate for a strict separation of church and state, and "accommodationists," who believe that government may promote some religious activities, can find common ground?			

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.191.396	01	S		**Politics of South Asia** *Chidambaram, Soundarya* This course is intended as an introductory seminar in comparative politics designed to acquaint participants with academic debates on a range of topics that are relevant to understanding the politics of contemporary South Asia. South Asia is a region that not only has a rich and complex history and culture, but also a region to study themes such as colonialism, nationalism, economic growth and development, democracy vs. authoritarianism, religious fundamentalism, and ethnic conflict. Whether it is the emerging radicalization of politics and consequent social strife in Pakistan, the paradox of democracy in India that is on the economic ascendant yet still beset by poverty and a poor track record in human development, whether it is the brutality of the military regime in Myanmar or the democratization of Bangladesh, whether it is the violent sectarian conflicts that have wracked the region or the grassroots social movements that have set an example, developments in the South Asian subcontinent continue to draw our attention to how developments within these countries shape global interactions as well as how international factors shape their political trajectories in turn. Drawing on multidisciplinary scholarship, this course will explore the history, culture, political economy, and contemporary debates in what has emerged as a strategically and economically vital region. Since the overwhelming majority of academic publications concerning the region use India as their case, the assigned readings may tend to have an India bias. However, we will use the theories developed in the Indian context to understand the politics of the other South Asian states, and ask how India-specific theories might be extended to capture the dynamics of its neighbors. The themes discussed during the course will be those that are crucial not only to understanding South Asia's trajectory, but also to a general study of politics in a developing country.	3.00	25	TTh 1:30-2:45PM
AS.211.394	01	H	W	**Brazilian Cult & Civ** *Bensabat Ott, Mary M*	3.00	35	M 2:00-4:20PM

Political Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is intended as an introduction to the culture and civilization of Brazil. It is designed to provide students with basic information about Brazilian history, art, literature, popular culture, theater, cinema, and music. The course will focus on how indigenous Asian, African, and European cultural influences have interacted to create the new and unique civilization that is Brazil today. The course is taught in English, but ONE extra credit will be given to students who wish to do the course work in Portuguese. Those wishing to do the course work in English for 3 credits should register for section 01. Those wishing to earn 4 credits by doing the course work in Portuguese should register for section 02. The sections will be taught simultaneously. Section 01: 3 credits Section 02: 4 credits (instructor's permission required)			
AS.211.394	02	H	W	**Brazilian Cult & Civ**	4.00	20	M 2:00-4:20PM
AS.213.368	01	H		**German Political Thought** *Tobias, Rochelle* This course will introduce students to major figures in German political thought from Martin Luther to Karl Marx and Immanuel Kant to Carl Schmitt. The class will explore such issues as the notion of sovereignty, the relationship between church and state, the theory of parliamentary democracy, and the political and economic ramifications of liberalism. Reading and discussion in English.	3.00	25	TTh 10:30-11:45AM
AS.215.327	01	H	W	**Modern Political Thought in Latin America** *Castro-Klaren, Sara* Juniors and Seniors only. The course is an introduction to modern political tough in Latin America. It draws on essays and novels written by major and influential political thinkers such as D.F. Sarmiento, Gonzalez Prada, J.C. Mariategui, Leopoldo Zea, J. E. Rodo, Octavio Paz, Jose Revueltas, Jose Maria Arguedas, Mario Vargas Llosa, Darcy Ribeiro, Enrique Dusssel and the authors of the Sumac Kawsay as well as Liberation Theology central writings. The course will be taught in English. Students wishing to do work in the original Spanish or Portuguese will be encouraged to do so.	3.00	25	W 1:30-4:00PM
AS.362.175	01	HS	W	**Black Power Movement** *Hayes, Floyd, III.* This course critically examines trends, developments, contradictions, and dilemmas related to the Black Power Movement for black identity and self-determination in the late 1960s and 1970s.	3.00	15	TTh 1:30-2:45PM

Program in Latin American Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.366	01	H	W	**Native American Art** *Deleonardis, Lisa* Survey of the principle visual arts of North America (1500 BC - AD 1600). Introduction to interpretive theory and methodology. Collections study in local and regional museums. Cross-listed with Programs in Museums and Society, Archaeology, and PLAS.	3.00	25	TTh 10:30-11:45AM
AS.010.398	01	H	W	**Tombs for the Living** *Deleonardis, Lisa* Centering on the tomb as a unit of analysis, this course examines how death and funerary ritual reflect the cultural values of the living and are an active force in shaping them. Drawing on case studies from Mesoamerica and the Andes we consider various approaches to entombment and funerary ritual.	3.00	25	TTh 3:00-4:45PM
AS.070.132	01	HS	W	**Invitation to Anthropology** *Poole, Deborah* Through readings that explore how anthropologists study such issues as race, gender, migration, territory, and the environment, this course introduces students to anthropology as a field of research and reflection that interrogates what it means to be human.Cross-listed with Humanities Center and PLAS.	3.00	75	TTh 12:00-1:15PM
AS.070.262	01	HS		**Cuban Intellectuals, Cinema, and the State** *Humphreys, Laura Zoe* This course examines the relationship between intellectuals and the Cuban state, focusing on how cinema and other arts have been mobilized both as propaganda and as sites for social criticism.Cross-List: Film and Media Studies; PLAS; GRLL Special Notes Spring 2013: Screenings are required for this course and will take place on Tuesdays from 7 pm to 9:30 pm.	3.00	20	Th 1:30-3:50PM; T 7:00-9:30PM
AS.070.304	01	HS	W	**Child Adoption and Family Making** *Reyes Kipp, Anaid Citlalli* Dean's Teaching Fellowship Course. The course takes child adoption as a starting point to critically explore how kinship and family are connected to legal practices, technological innovations, and broader historical, political, and socio-economic processes. Cross List: WGS, PLAS.	3.00	15	M 4:00-6:20PM
AS.100.440	01	HS	W	**The Revolutionary Experience in Latin America** *Knight, Franklin* Comparative examinations of revolutionary political changes in Haiti, Mexico, Bolivia, and Cuba. Cross-listed with Latin American Studies	3.00	20	TTh 10:30AM-12:00PM
AS.190.419	01	S	W	**Identity and Nations in Latin American Politics** *Keck, Margaret E*	3.00	20	T 3:00-5:20PM

Program in Latin American Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This seminar class explores formation and political mobilization of identies - group, ethnic, gendered, national, cosmopolitan - in Latin America. Although some of the reading will be broadly comparative, the spring 2013 version of the class will focus especially on Brazil. Requirements will include short response papers and a term paper. Portuguese or Spanish desirable but not required. Enrolled students must be juniors or seniors and must have taken at least one prior course in comparative politics.			
AS.210.392	01	H	W	**Advanced Portuguese: Language and Literature** *Bensabat Ott, Mary M* This course focuses on reading, writing, and oral expression. Under the supervision of the instructor, students will read several works by major Brazilian, Portuguese, and/or Afro-Portuguese writers, followed by intensive writing and oral discussion on the topics covered. Grammar will be reviewed as necessary. Lab work required. The course is conducted entirely in Portuguese. No satisfactory/unsatisfactory. Pre-requisites: 210.391, or placement test. Instructor permission required.	3.00	15	MWF 9:00-9:50AM
AS.211.394	01	H	W	**Brazilian Cult & Civ** *Bensabat Ott, Mary M* This course is intended as an introduction to the culture and civilization of Brazil. It is designed to provide students with basic information about Brazilian history, art, literature, popular culture, theater, cinema, and music. The course will focus on how indigenous Asian, African, and European cultural influences have interacted to create the new and unique civilization that is Brazil today. The course is taught in English, but ONE extra credit will be given to students who wish to do the course work in Portuguese. Those wishing to do the course work in English for 3 credits should register for section 01. Those wishing to earn 4 credits by doing the course work in Portuguese should register for section 02. The sections will be taught simultaneously. Section 01: 3 credits Section 02: 4 credits (instructor's permission required)	3.00	35	M 2:00-4:20PM
AS.211.394	02	H	W	**Brazilian Cult & Civ**	4.00	20	M 2:00-4:20PM
AS.215.327	01	H	W	**Modern Political Thought in Latin America** *Castro-Klaren, Sara*	3.00	25	W 1:30-4:00PM

Program in Latin American Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Juniors and Seniors only. The course is an introduction to modern political tough in Latin America. It draws on essays and novels written by major and influential political thinkers such as D.F. Sarmiento, Gonzalez Prada, J.C. Mariategui, Leopoldo Zea, J. E. Rodo, Octavio Paz, Jose Revueltas, Jose Maria Arguedas, Mario Vargas Llosa, Darcy Ribeiro, Enrique Dusssel and the authors of the Sumac Kawsay as well as Liberation Theology central writings. The course will be taught in English. Students wishing to do work in the original Spanish or Portuguese will be encouraged to do so.			
AS.215.402	01	H	W	**Senior Seminar: Literaturas y culturas del Cono Sur: Argentina, Uruguay y Chile** *Gonzalez, Eduardo* Advanced Spanish and reading proficiency. Estudio de las culturas literarias de Argentina, Uruguay y Chile en sus respectivos contextos sociales y políticos desde la conquista española. Las culturas indígenas, el desarrollo de la nación, las culturas populares, culturas inmigrantes, regímenes políticos, actualidad económica y social en la época de la globalización.	3.00	30	Th 1:30-4:00PM
AS.230.346	01	S		**Contemporary Economic Sociology of Latin America** *von der Heydt-Coca, Magda Zonia* This course will offer an overview of Latin America's economic reality as an intertwined process of economic and political domestic factors within the constraints of the world economy. Latin American development will be analyzed from ahistorical perspective. The first half of the semester the course will focus on the analysis of the economic developmental patterns starting in the middle of the 19thcentury to the populist era in the middle of the 20thcentury. In the second half of the semester, we will analyze in depth the contemporary neoliberal approach to development. Globalization is the force that drives economic, social and political processes in Latin America. The course will include case studies as well the social conflicts generated by the increasing polarization of the society. Students will be exposed to important sociological theories. Cross-listed with the Program in Latin American Studies and International Studies. Fulfills Economics requirement fo IS GSCD students only.	3.00	25	TTh 10:30-11:45AM
AS.361.124	01	HS		**Latin American Film: Mini-Course** *Cervone, Emma* This course provides a brief, four-week, one-credit introduction to the cultural, political and aesthetic domains of Latin American cinema through thematically focused discussions of four feature-length films. Class Dates: March 7,14, 28 and April 4, 2013.	1.00	65	Th 1:30-3:50PM
AS.361.170	01	HS		**NI DE AQUI NI DE ALLA: INTRODUCTION TO LATINO STUDIES**	3.00	25	TTh 12:00-1:15PM

Program in Latin American Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Cervone, Emma Through readings and discussion of texts, viewing of films and performance art, this course studies varied histories of Mexican, Puerto Rican, Cuban and other Latin American peoples in the U.S. Students will develop a general understanding of major issues facing Latinos/as in the 21st century as well as gain an understanding of the impact Latino culture has on US society and politics.			
AS.361.234	01	HS		**The Changing Face of Baltimore: Education, Health, and Other Issues among Latinos in Baltimore City** *Cervone, Emma* In this hands-on course, students will complete a service learning project with a non-profit organization serving the Latino community in Baltimore City. While the focus is on education and health, students will explore race, class, gender, and immigration issues impacting Latinos.	3.00	20	T 6:30-8:50PM
AS.361.316	01	HS		**Caribbean Writing in Shakespeare, V. S. Naipaul, and Alejo Carpentier** *Gonzalez, Eduardo* Readings and polemics concerned with Shakespeare´s play The Tempest (1610-1611) and its postcolonial afterlives; V. S. Naipaul´s novel A House for Mr. Biswas (1961); and Alejo Carpentier´s El siglo de las luces (1962). The socio historical and political contexts of each work and authorship will be considered in depth in terms of dominant notions of writing in current critical theory. Cross-listed with GRLL, English, and Writing Seminars.	3.00	20	M 1:30-3:50PM

Program in Museums and Society

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.366	01	H	W	**Native American Art** *Deleonardis, Lisa* Survey of the principle visual arts of North America (1500 BC - AD 1600). Introduction to interpretive theory and methodology. Collections study in local and regional museums. Cross-listed with Programs in Museums and Society, Archaeology, and PLAS.	3.00	25	TTh 10:30-11:45AM
AS.010.398	01	H	W	**Tombs for the Living** *Deleonardis, Lisa* Centering on the tomb as a unit of analysis, this course examines how death and funerary ritual reflect the cultural values of the living and are an active force in shaping them. Drawing on case studies from Mesoamerica and the Andes we consider various approaches to entombment and funerary ritual.	3.00	25	TTh 3:00-4:45PM
AS.010.424	01	H		**Collecting Roman Art: From Antiquity to Present** *Tucci, Pier Luigi* A survey of the most important collections of Greek and Roman sculpture, from the late-Republican age through the Middle Ages and the Renaissance, until the creation of the main museums in Europe and in the United States.	3.00	25	TTh 4:30-5:45PM
AS.040.119	01	H		**The World of Pompeii** *Valladares, Herica* This course will focus on the history and archaeology of Pompeii. Close attention will also be paid to the reception of Pompeian materials in European and American culture. Cross-listed with History of Art and the Program in Museums and Society.	3.00	25	MW 12:00-12:50PM; F 12:00-12:50PM
AS.040.119	02	H		**The World of Pompeii**	3.00	25	MW 12:00-12:50PM; F 1:30-2:20PM
AS.389.130	01	H		**Mini Course: Conservation, An Introduction to Technical Art History** *Staff* Look through the eyes of a conservator and learn how to answer historical questions by analyzing the physical nature of works of art. Objects examined will include paintings, sculpture and works on paper from the collection of the Baltimore Museum of Art. Class meets 4 times, on February 7, 14, 21 and 28, at the BMA. Syllabus and organizational meeting at JHU on Thursday, January 31, 5:30pm. Department permission required.	1.00	7	Th 3:00-5:20PM
AS.389.202	01	HS		**Introduction to the Museum: Issues and Ideas** *Kingsley, Jennifer Pascale* This course considers the practical, political, and ethical challenges facing museums today, including the impact of technology and globalization, economic pressures, and debates over the ownership and interpretation of culture.	3.00	15	TTh 1:30-2:45PM
AS.389.275	01	HS		**Interpreting Collections: An Introduction to Museum Education** *Staff*	3.00	12	T 1:30-3:50PM

Program in Museums and Society

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Part public history, part introduction to museum practices, this hands-on course invites students into a local collection to develop interpretive materials for diverse audiences. Students consider the issues and ideas that inform object-based learning and learn about the history, theory and practice of museum education. Course culminates in the creation of interpretive text for the Baltimore Museum of Industry. M&S practicum course.			
AS.389.320	01	HS		**Photographs on the Edge: Ara Güler in Archives of the Smithsonian's Freer and Sackler Galleries** *Staff* Work as a curator alongside Smithsonian staff, researching the work of Turkish photographer Ara Güler to develop an exhibit that considers relationships between the history of photography, archives and the museum. Class will travel several times to the Freer and Sackler Galleries in Washington D.C. M&S practicum course.	3.00	12	W 3:00-5:20PM
AS.389.360	01	H		**American Literature on Display** *Dean, Gabrielle* Focusing on late 19th and early 20th c American literature, course examines representations of "display" within different literary genres and track how display simultaneously shapes print culture and social concerns of the period. Course culminates in the creation of a student-curated digital exhibit using archival and rare book materials to contextualize the work of the journalist, poet and fiction writer Stephen Crane. M&S practicum course.	3.00	12	M 3:00-5:20PM

Psychological & Brain Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.050.102	01	NS		**Language and Mind** *Omaki, Akira* Introductory course dealing with theory, methods, and current research topics in the study of language as a component of the mind. What it is to “know” a language: components of linguistic knowledge (phonetics, phonology, morphology, syntax, semantics) and the course of language acquisition. How linguistic knowledge is put to use: language and the brain and inguistic processing in various domains. Cross-listed with Neuroscience and Psychology.	3.00	50	TTh 9:00-10:15AM
AS.050.312	01	NS		**Cognitive Neuroimaging Methods in High-Level Vision** *Park, Soojin* This course is an advanced seminar and research practicum course. It will provide the opportunity to learn about fMRI methods used in the field of vision science and for students to have hands-on experience to develop, design and analyze a research study on topics in the cognitive neuroscience field of high-level vision. In the first part of the course students will read recent fMRI journal papers and learn about common fMRI designs and analysis methods; in the second part of the course students will conduct a research study as a group to address a research question developed from readings. Students are expected to write a paper in a journal article format at the end of the course and to present their results in front of the class. Research topics will vary but with special focus on topics in object, scene and space recognition. Cross-listed with Neuroscience and Psychology. Prereqs. AS.050.204, AS.050.319, AS.050.203,AS.080.203, AS.050.315 or 200.312, or equivalent; instructor's permission required.	3.00	10	T 1:30-4:00PM
AS.080.330	01	N	W	**Brain Injury & Recovery** *Gorman, Linda K* Prereq: (080.305 & 080.306) or (020.312 and 020.306) or (200.141 and 020.306) or Permission of Instructor. This course investigates numerous types of brain injuries and explores the responses of the nervous system to these injuries. The course's primary focus is the cellular and molecular mechanisms of brain injury and the recovery of function. Discussions of traumatic brain injury, stroke, spinal cord, and tumors, using historical and recent journal articles, will facilitate students' understanding of the current state of the brain injury field. Cross-listed with Psychological and Brain Sciences and Behavioral Biology	3.00	30	WF 10:30-11:45AM
AS.200.101	01	NS		**Intro To Psychology** *Holland, Peter C* This course surveys all the major areas of scientific psychology, including the physiological bases of behavior; sensation and perception; learning, memory and cognition; developmental, social, and personality psychology; and psychopathology.	3.00	400	TTh 9:00-10:15AM

Psychological & Brain Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.200.110	01	NS		**Introduction to Cognitive Psychology** *Flombaum, Jonathan* Introductory survey of current research and theory on topics in cognitive psychology. The course will cover a range of topics in perception, attention, learning, reasoning, and memory, emphasizing relationships among mind, brain, and behavior.	3.00	350	TTh 10:30-11:45AM
AS.200.133	01	S		**Intro Social Psychology** *Drigotas, Stephen M* An introductory survey of social psychology. Topics include social perception, social cognition, attitudes, prejudice, attraction, social influence, altruism, aggression, and group behavior.	3.00	400	MWF 11:00-11:50AM
AS.200.141	01	NS		**Foundations of Brain, Behavior and Cognition** *Gorman, Linda K* Formerly listed as Introduction to Physiopsychology. A survey of neuropsychology relating the organization of behavior to the integrative action of the nervous system. Cross-listed with Behavioral Biology and Neuroscience.	3.00	250	TTh 9:00-10:15AM
AS.200.161	01	S		**Illusions, delusions, and other confusions: Why what you think you know about human nature is (largely) wrong** *Egeth, Howard E* Freshmen Only. This course is suitable for all, but would be especially useful for a student who does not expect to take many (or any) additional psychology or cognitive science courses. We will explore what modern psychology has uncovered about how our intuitions concerning human nature deceive us.	1.00	13	Th 2:00-2:50PM
AS.200.204	01	S	W	**Human Sexuality** *Kraft, Chris S* Juniors and Seniors only within the following majors/minors: Behavioral Biology, Biology, Neuroscience, Psychological & Brain Sciences, Public Health, and the Study of Women, Gender, & Sexuality. All registration will be done during the normal registration period and you must meet all requirements to register. Course focuses on sexual development, sexuality across the lifespan, gender identity, sexual attraction and arousal, sexually transmitted disease, and the history of commercial sex workers and pornography. Formerly taught as 200.302	3.00	25	T 12:00-2:20PM
AS.200.204	02	S	W	**Human Sexuality**	3.00	25	T 9:00-11:20AM
AS.200.208	01	NS		**Animal Behavior** *Madison, Farrah* Examines basic principles of animal behavior (orientation, migration, communication, reproduction, parent-offspring relations, ontogeny of behavior and social organization). Evolution and adaptive significance of behavior will be emphasized.	3.00	180	TTh 9:00-10:15AM
AS.200.211	01	NS		**Sensation & Perception** *Yantis, Steven*	3.00	100	MWF 9:00AM-9:50PM

Psychological & Brain Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				An examination of how humans perceive and experience the world using all their senses, with a focus on perceptual cognition, brain, and behavior.			
AS.200.301	01	HS		**History Of Psychology** *Hofer, Paul Jeffrey* Prereq: Two prior Psychology courses Juniors and Seniors only A survey of leading figures, schools, and systems in the history of psychology. The course will emphasize the development of experimental psychology in late 19th century Germany and its establishment in America at Johns Hopkins, Harvard, Chicago, and Columbia. Special topics will include the development of clinical and applied psychology and psychological testing.	3.00	50	Th 4:30-6:50PM
AS.200.304	01	N		**Neuroscience of Decision Making** *Stuphorn, Veit* Prereq: 080.205 or 080.305 or 200.141 - This course will survey the neural mechanisms of decision-making. Current experimental research and theory concerning selection, control, and evaluation of actions are examined in humans and animals. Topics will range from simple perceptual judgements to complex social behavior. The course involves a weekly lecture about a specific topic followed by a student presentation of a current research paper. Cross-listed with Neuroscience	3.00	19	TTh 9:00-10:15AM
AS.200.306	01	S		**Psychology in the Workplace** *Roberts Fox, Heather* Industrial-organizational (I-O) psychology is the scientific study of the workplace. Rigor and methods of psychology are applied to issues of critical relevance to business, including talent management, coaching, assessment, selection, training, organizational development, performance, and work-life balance.	3.00	19	TTh 1:30-2:45PM
AS.200.315	01	Q		**Adv Rsch Design/Analysis** *Shelton, Amy* Prereq: 200.314 or equivalent. Signature required for undergrad registration. Second half of graduate statistics sequence, covering complex research design and analysis.	3.00	25	TTh 9:00-10:15AM
AS.200.317	01	S		**Interpersonal Relations** *Drigotas, Stephen M* Prereq: 200.133 Open to Psychology and Behavioral Biology majors only. This course will investigate interpersonal processes ranging from attraction and courtship to relationship functioning and distress.	3.00	30	MW 1:30-2:45PM
AS.200.325	01	S		**Law Psych:Clinical Appl** *Raifman, Lawrence J* Introduction to legal standards governing criminal forensic psychology assessments, e.g., competence to stand trial, criminal responsibility, mitigation of death penalty, negation of mens rea, and other criminal law forensic applications. Cross-listed with Behavioral Biology	3.00	100	T 3:00-5:30PM

Psychological & Brain Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.200.328	01	S	W	**Thry-Mthds/Clinical Psyc** *Edwin, David H* A critical examination of the methods of observation, description, reasoning, inference, measurement and intervention that underlie the clinical practice of psychology and psychiatry. Cross listed with Behavioral Biology. Prereq: 200.212; Junior and Senior Psychology, Behavioral Biology and Cognitive Science majors only OR instructor approval.	3.00	25	M 6:00-8:20PM
AS.200.343	01	S		**Motivation** *Petri, Herbert* Prereq: 200.101 and 200.146 or Perm. Req'd. Cross-listed with Behavioral Biology Current biological, behavioral, and cognitive research and theory concerning the motivation of behavior are examined. Both human and non-human animal research is reviewed. Topics include the role of genetics, arousal, biological regulatory systems, incentives, expectancies, attributions, social processes and self-actualization in the general of behavior.	3.00	25	M 1:30-3:50PM
AS.200.361	01	S		**Tests & Measurements** *Roberts Fox, Heather* This course will consider the methodological, theoretical, legal, and ethical problems involved in test construction, the evaluation of instruments, and the uses of psychological tests in various settings and for different purposes. Prereq: As.200.207, Junior and Senior Psychology, Behavioral Biology and Cognitive Science majors only or Instructor approval.	3.00	25	TTh 12:00-1:15PM
AS.200.368	01	NS		**Altered States of Consciousness** *Allen, Richard*	3.00	60	TTh 4:00-5:15PM

Psychological & Brain Sciences

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: Intro Psych and 080.203 or Permission & Signature required. Cross-listed with Neuroscience Sleep, dreaming, resting and arousal to waking represent very different states of consciousness which differ dramatically both psychologically and physiologically. This course focuses on cognitive, psychological, physiological, biological and genetic aspects characterizing each of these states with some reference to other altered states. The course includes a focus on the major pathologies affecting sleep-wake states. Clinical cases will be considered. These inform about both psychological and biological aspects of these states. The relative biological functions of each state will be evaluated with particular attention to the mystery of why we have and apparently need REM and NREM sleep. Actual physiological recordings of sleep states will be reviewed and the student will learn how these are obtained and how to evaluate these. The circadian rhythms, ontogeny and evolution of these sleep-wake states will also be covered. This will include a review of information learned from non-human animal sleep. The change from sleep to full awakening reflects change toward increasing brain organization supporting consciousness. Understanding of the neurobiology of these states will be used to explore some of the more modern and scientific concepts of human self-awareness or consciousness.			
AS.200.372	01	NS		**Psychology Of Aging** *Gallagher, Michela* We will examine what current research can tell us about changes in mental abilities as we grow older, what biological changes in the brain during aging cause cognitive decline, and finally, how scientists are meeting the challenge of maintaining the functions of the mind into advanced old age.	3.00	30	TTh 9:00-10:15AM
AS.290.420	01	S	W	**Human Sexual Orientation** *Kraft, Chris S* Limited to Juniors & Seniors with PBS, Neuroscience, Public Health, Cog. Sci., Behaviorial Biology, and Biology majors, or Juniors and Seniors with PBS or Women's Studies minors. This course will examine the historical and current theories of sexual orientation and sexual variation development by examining the biological, psychological and social contributing factors that influence the development of sexual orientations and variations along with treatment and modification of problematic sexual behaviors. Cross-listed with Psychological & Brain Sciences and Studies of Women, Gender, and Sexuality	3.00	25	T 3:00-5:30PM

Public Health Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.140.106	01	HS		**History of Modern Medicine** *Greene, Jeremy* This course examines medical ideas, practices, and structures in their historical context and social setting, in Europe and the United States, from the 18th century to the present. Cross-listed with Public Health Studies	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	02	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	03	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	04	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.140.106	05	HS		**History of Modern Medicine**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.190.354	01	S		**Politics of Health Policy** *Longman, Phillip* Traces the evolution of the American Health care system, emphasis on the political forces that shape public and private provision of health care in the United States. Cross-listed with Public Health	3.00	15	Th 3:00-5:30PM
AS.211.416	01	H		**Visual Languages in Medical Knowledge** *Wegenstein, Bernadette* This interdisciplinary course, co-taught by professor Veena Das (Anthropology) and Research professor and filmmaker Bernadette Wegenstein (German and Romance Languages and Literatures) will track the mediation of images in the making of medical knowledge and show how sensory knowledge is incorporated or transformed in the process. Co-listed with 214.616 and 070.416	3.00	15	W 3:00-5:30PM
AS.230.150	01	S		**Issues in International Development** *Agarwala, Rina* Freshmen and Sophomores only. This course will provide an undergraduate level introduction to the study and practice, as well as the successes and failures, of international development. Students will be introduced to the various theoretical frameworks used to explain underdevelopment. Students will also explore the practice of development since the 1950s by examining specific strategies employed in Latin America, South Asia, East Asia, and Africa. Using a variety of country-specific case studies, students will have the opportunity to apply the theoretical and practical frameworks learned in the class to assess the successes and failures of real-life cases. Fufills Economics requirement for IS GSCD track students only.	3.00	30	W 1:30-3:20PM; F 1:30-2:20PM
AS.230.150	02	S		**Issues in International Development**	3.00	30	W 1:30-3:20PM; F 2:30-3:20PM
AS.230.341	01	S		**Medical Sociology** *Agree, Emily* This course introduces students to medical sociology, which is the application of the sociological perspective to health and health care. Major topics include stress, social epidemiology, and the social organization of health care. Cross-listed with Public Health Studies	3.00	15	M 3:00-4:50PM; W 3:00-3:50PM
AS.230.341	02	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 3:00-3:50PM

Public Health Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.230.341	03	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 3:00-3:50PM
AS.230.341	04	S		**Medical Sociology**	3.00	15	W 4:00-4:50PM; M 3:00-4:50PM
AS.230.341	05	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 4:00-4:50PM
AS.230.341	06	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 4:00-4:50PM
AS.270.107	01	N		**Introduction to Sustainability** *Parker, Cindy L* Will introduce interactions between global environment and humans, discuss meaning of sustainability, and introduce use of tools to attain sustainability such as policy, law, communication, marketing, research, advocacy, international treaties.	3.00	110	TTh 3:00-4:15PM
AS.270.360	01	N		**Climate Change: Science & Policy** *Zaitchik, Benjamin* Prereq: 270.103 or permission of instructor. This course will investigate the policy and scientific debate over global warming. It will review the current state of scientific knowledge about climate change, examine the potential impacts and implications of climate change, explore our options for responding to climate change, and discuss the present political debate over global warming.	3.00	60	MW 1:30-2:45PM
AS.280.101	01	S		**Introduction to Public Health** *Alexander, Miriam* An overview of the major concepts and themes in Public Health utilizing the social and natural science disciplines in populations world-wide.	3.00	125	TTh 3:00-4:15PM
AS.280.120	01	S		**Lectures on Public Health and Wellbeing in Baltimore** *Leaf, Philip* An introduction to Urban Health with Baltimore as a case study: wellbeing, nutrition, education, violence and city-wide geographic variation. Lectures by JH Faculty, local government/service providers and advocates. Section 01 is restricted to Seniors only Section 02 is restricted to Juniors only Section 03 is restricted to Sophomores only Section 04 is retricted to Freshmen only Grading is S/U Only	1.00	20	T 4:30-5:45PM
AS.280.120	02	S		**Lectures on Public Health and Wellbeing in Baltimore**	1.00	20	T 4:30-5:45PM
AS.280.120	03	S		**Lectures on Public Health and Wellbeing in Baltimore**	1.00	30	T 4:30-5:45PM
AS.280.120	04	S		**Lectures on Public Health and Wellbeing in Baltimore**	1.00	30	T 4:30-5:45PM
AS.280.121	01	N		**Chemical Karma: From Pollution to Disease** *Gribble, Matthew* This course follows several pollutants from their industrial sources to their human health outcomes, and teaches how to rigorously/systematically search for and synthesize concepts in environmental health literature. Term paper. E²SHI Fellowships	3.00	18	TTh 3:00-4:15PM
AS.280.217	01	S		**Youth Bullying, Aggression, and Public Health** *Duong, Jeffrey*	3.00	18	TTh 10:30-11:45AM

Public Health Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course examines bullying and aggression among school-aged youth from a public health perspective. We will explore the prevalence of bullying, theories about its etiology, and recent prevention efforts.			
AS.280.304	01	S		**Transforming Disease: HIV/AIDS and the production of chronic illness** *Philbin, Morgan Mari* Drawing primarily on public health, anthropology, and sociology literature, the course critically examines debates surrounding the production of chronic illness, and resulting contestations as practices, laws, and policy are transformed.	3.00	18	MW 3:00-4:15PM
AS.280.315	01	S		**Nutrition: Concepts and Controversies** *Schrack, Jennifer Ann* Nutrition is a fundamental component of human health and a challenging science, with individual and societal factors that span the country and the world. The primary objective of this course is to provide a fundamental understanding of human nutrition and its role in public health by addressing multiple components including the core micro- and macro- nutrients, and food choices and their implications for personal health. The secondary objective is to examine many of today's nutrition controversies, both scientific and societal. Accordingly, this course will encourage students to think about nutrition and its critical contribution to public health on individual, societal, and global levels. A fundamental knowledge of biology and/or anatomy and physiology is recommended.	3.00	40	MW 1:30-2:45PM
AS.280.320	01	S		**Seminar on Public Health and Wellbeing in Baltimore** *Leaf, Philip* Seminar combines lectures from 280.120 with additional readings and discussion to more deeply address urban health issues. If you register for this course you do NOT register for 280.120. Course is open to Sophomores and Juniors only, or by instructor's permission.	3.00	30	T 4:30-5:45PM; Th 4:30-5:45PM
AS.280.340	01	S		**Fundamentals of Health Policy & Management** *Steinwachs, Donald M* Through lectures and small group discussions, students will develop a framework for analyzing health care policy problems and gain familiarity with current issues including managed care, Medicare and the uninsured.	3.00	25	MW 3:00-3:50PM; M 4:00-4:50PM
AS.280.340	02	S		**Fundamentals of Health Policy & Management**	3.00	25	MW 3:00-3:50PM; M 4:00-4:50PM
AS.280.340	03	S		**Fundamentals of Health Policy & Management**	3.00	25	MW 3:00-3:50PM; M 4:00-4:50PM
AS.280.340	04	S		**Fundamentals of Health Policy & Management**	3.00	25	W 4:00-4:50PM; MW 3:00-3:50PM
AS.280.340	05	S		**Fundamentals of Health Policy & Management**	3.00	25	W 4:00-4:50PM; MW 3:00-3:50PM
AS.280.340	06	S		**Fundamentals of Health Policy & Management**	3.00	25	W 4:00-4:50PM; MW 3:00-3:50PM

Public Health Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.280.340	07	S		**Fundamentals of Health Policy & Management**	3.00	25	MW 3:00-3:50PM; M 4:00-4:50PM
AS.280.350	01	Q		**Fundamentals of Epidemiology** *Phelan, Darcy F* Juniors and Seniors only. A practical introduction to epidemiology focusing on the principles and methods of examining the distribution and determinants of disease morbidity and mortality in human populations..	3.00	25	MW 3:00-4:15PM; F 3:00-4:15PM
AS.280.350	02	Q		**Fundamentals of Epidemiology**	3.00	25	MW 3:00-4:15PM; F 3:00-4:15PM
AS.280.350	03	Q		**Fundamentals of Epidemiology**	3.00	25	MW 3:00-4:15PM; F 3:00-4:15PM
AS.280.350	04	Q		**Fundamentals of Epidemiology**	3.00	25	MW 3:00-4:15PM; F 3:00-4:15PM
AS.280.350	05	Q		**Fundamentals of Epidemiology**	3.00	25	MW 3:00-4:15PM; F 3:00-4:15PM
AS.280.375	01	S		**Cultural Factors of P.H.** *Laveist, Thomas A* This course covers influence of culture on health policy, management and practice. Also, provides background in disparities in health in the US. Guest speakers include healthcare providers, managers, and policy-makers.	3.00	75	TTh 9:00-10:15AM
AS.280.380	01	S		**Introduction to Global Health** *Tielsch, James M* Open to Seniors and Juniors, at least one prior course in Public Health recommended. Sophomores may enroll if they have taken AS.280.345 (Public Health Biostats) OR have successfully completed atleast two public health courses. This course will run from 1/28/2013 to 3/15/2013. Introduces approaches used by various countries in solving their health and medical care problems, and the role of major international health organizations. Analyzes some of the current important issues in global health.	3.00	60	MWF 8:00-9:50AM
AS.280.401	01	S		**Alcohol, Media & Health** *Cukier, Samantha* Public Health Majors only or Perm. Req'd: Students will critically examine the public health impact of alcohol marketing and assess the consequences of the resulting change in patterns of alcohol use. Gordis Teaching Fellowship course.	3.00	18	Th 1:30-4:00PM
AS.280.402	01	S		**HIV, Behavior and Society** *Sun, Christina* Public Health Majors only or Perm. Req'd: This class will examine the behaviors associated with the HIV epidemic. We will explore the importance of behavior and context that affect the transmission, prevention, and treatment of HIV. Gordis Teaching Fellowship course.	3.00	18	TTh 3:00-4:15PM
AS.280.403	01	S		**Introduction to Intimate Partner Violence and Public Health** *Robinson, Amber Brook*	3.00	18	TTh 1:30-2:45PM

Public Health Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Public Health Majors only or Perm. Req'd: This course provides an introduction to the public health implications of intimate partner violence and the spectrum of activities used to understand and combat it - from measurement to intervention. This course will cover a variety of topics, focusing on both research and programming, including: qualitative and quantitative research methods, individual- and community-level interventions, ethical challenges, and populations of interest. Gordis Teaching Fellowship course.			
AS.280.404	01	N		**Immunity and Infectious Diseases of Public Health Importance** *Craig, John M* Prereq: AS.020.151/2 or AP Biology. Provides an overview of innate and adaptive immunity as they relate to the control of infection and the development of treatment and vaccination strategies for pathogens of public health significance. Gordis Teaching Fellowship course.	3.00	18	MWF 10:00-10:50AM
AS.280.405	01	S		**Public Health and Human Rights** *Davis, William W* Public Health Majors only or Perm. Req'd: This course explores the links between public health and human rights, applies HR frameworks to PH policies, and explains why the human rights have been called "The conscience of public health." Gordis Teaching Fellowship course.	3.00	18	TTh 9:00-10:15AM
AS.280.499	01	S	W	**Honors in Public Health** *Gebo, Kelly* Perm. Req'd A research methods seminar to prepare students doing honors in Public Health Studies.	3.00		TBA
EN.660.336	01	S	W	**Community Engineering: Interdisciplinary Problem Solving** *Rice, Eric* So many big and seemingly intractable problems inhibit progress and diminish quality of life especially in and around urban communities. Surely there are ways to begin to tackle some of these problems, if we approach them from a multi-disciplinary perspective. This course provides that opportunity as students, who work primarily in teams, apply theory and ingenuity to investigate problems, propose solutions or invent devices that address some of these problems. Class time is spent in lecture, discussion, and applied community projects to master content. Time will be spent participating on teams and working in community organizations in addition to class.	3.00	32	TTh 12:00-1:15PM

Sociology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.230.101	01	S		**Intro Sociology** *Cherlin, Andrew J* Introduces students to basic sociological concepts and perspectives, and applies them to a variety of topics including family, work, and the dynamics of class, gender, and racial/ethnic inequalities in the United States and globally.	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.230.101	02	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.230.101	03	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.230.101	04	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 10:00-10:50AM
AS.230.101	05	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 9:00-9:50AM
AS.230.101	06	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 11:00-11:50AM
AS.230.101	07	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 11:00-11:50AM
AS.230.101	08	S		**Intro Sociology**	3.00	15	MW 10:00-10:50AM; F 11:00-11:50AM
AS.230.150	01	S		**Issues in International Development** *Agarwala, Rina* Freshmen and Sophomores only. This course will provide an undergraduate level introduction to the study and practice, as well as the successes and failures, of international development. Students will be introduced to the various theoretical frameworks used to explain underdevelopment. Students will also explore the practice of development since the 1950s by examining specific strategies employed in Latin America, South Asia, East Asia, and Africa. Using a variety of country-specific case studies, students will have the opportunity to apply the theoretical and practical frameworks learned in the class to assess the successes and failures of real-life cases. Fufills Economics requirement for IS GSCD track students only.	3.00	30	W 1:30-3:20PM; F 1:30-2:20PM
AS.230.150	02	S		**Issues in International Development**	3.00	30	W 1:30-3:20PM; F 2:30-3:20PM
AS.230.202	01	S	W	**Research Methods for the Social Sciences** *Hao, Lingxin* The purpose of this course is to provide a sound introduction to the overall process of research and the specific research methods most frequently used by sociologists and other social scientists. Required for IS GSCD track students.	3.00	30	TTh 1:30-2:45PM
AS.230.213	01	S	W	**Social Theory** *Andreas, Joel* This course provides an introduction to classical sociological theories (with an emphasis on Marx, Weber, and Durkheim). Contemporary theoretical perspectives on social inequality, conflict, and social change are also explored. Emphasis is placed on understanding the theoretical constructs as well as on applying them in the analysis of current social issues. Required for IS GSCD track students.	3.00	30	TTh 10:30-11:45AM
AS.230.228	01	S		**Colonialism in Asia and Its Contested Legacies** *Kuo, Huei-Ying*	3.00	20	TTh 1:30-2:45PM

Sociology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This seminar examines the theories and historiography of colonialism in Asia, with special focus on the development of British Straits Settlements and Hong Kong as well as Japanese Taiwan. We will review the competing discourses about the impact of colonial dominations in these areas from the 1800s to the present-day. In the beginning of the era, the British built up the economic linkage between Hong Kong and Penang, Malacca as well as Singapore to sustain its dominance throughout the "Far East." In the middle of the period, the expanding Japanese empire developed Taiwan as a footstep to compete with the British interests in South China and Southeast Asia. Hong Kong and the Straits Settlements, especially Singapore, became the contested terrain where two colonial powers vied for their influences in the region. The competition was not only about trade, but about the construction of a new East Asian regional order after the end of the Chinese hegemony. In the end of the period, the intervention of the US power in postwar Asia facilitated the retreat of the colonial establishments, British and Japanese ones included. The course that compares the colonial establishments and discourses on colonial legacies among the three areas points out that colonialism constituted an inalienable part of Asian history. Cross listed International Studies (CP) and East Asian Studies. Fufills History requirement for IS GSCD track students only.			
AS.230.255	01	S		**Men and Women in Society** *McDonald, Katrina Bell* This course will explore what it means to be male or female through academic writings, fiction, and film. It will examine how genders are defined by individuals, cultures, and institutions, and how those meanings shape everyday life for men and women. Power, inequality, and intersections with race-ethnicity, class, and sexuality will be a primary focus. Theories of gender addressed will include those related to masculinity, social psychology, feminism, and intersectionality. Though the course will primarily consider the United States, gender in other countries and cultures will also be addressed. Cross-listed with WGS.	3.00	30	TTh 10:30-11:45AM

Sociology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.230.265	01	QS		**Research Tools and Technologies for the Social Sciences** *Karatasli, Sahan Savas* This course will introduce students to a range of digital technologies that are critical for conducting social scientific research in the 21st century. Students will develop competency in the use of computer programs for statistical analysis, database management, the creation of maps and timelines, and the presentation of research reports. The research tools and technologies will be taught using examples from ongoing social science faculty research projects at Johns Hopkins on global inequality and international development and on the 2010-2012 global wave of social protest. Required for IS GSCD track students.	3.00	15	MWF 11:00-11:50AM
AS.230.316	01	S		**African American Family** *McDonald, Katrina Bell* This course is an examination of sociological theories and studies of African-American families and an overview of the major issues confronting African-American family life. The contemporary conditions of black families are explored, as well as the historical events that have influenced the family patterns we currently observe. Special attention will be given to social policies that have evolved as a result of the prominence of any one perspective at a given point in time.	3.00	30	TTh 1:30-2:45PM
AS.230.322	01	QS		**Quantitative Research Practicum** *Plank, Stephen* Juniors and Seniors only. Sophomores require instructor's permission. This course provides “hands on” research experience applying sociological research tools and a sociological perspective to problems of substance. Quantitative methods will be emphasized, as applied to census data, survey data and/or archival data. Students will design and carry out a research project and write a research report. Prerequisites: 230.205/Social Statistics and 230.202/Research Methods for the Social Sciences	3.00	25	WF 1:30-2:45PM
AS.230.341	01	S		**Medical Sociology** *Agree, Emily* This course introduces students to medical sociology, which is the application of the sociological perspective to health and health care. Major topics include stress, social epidemiology, and the social organization of health care. Cross-listed with Public Health Studies	3.00	15	M 3:00-4:50PM; W 3:00-3:50PM
AS.230.341	02	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 3:00-3:50PM
AS.230.341	03	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 3:00-3:50PM
AS.230.341	04	S		**Medical Sociology**	3.00	15	W 4:00-4:50PM; M 3:00-4:50PM
AS.230.341	05	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 4:00-4:50PM
AS.230.341	06	S		**Medical Sociology**	3.00	15	M 3:00-4:50PM; W 4:00-4:50PM
AS.230.344	01	S	W	**Health and Society in Contemporary China** *Core, Rachel S*	3.00	20	TTh 3:00-4:15PM

Sociology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This class examines the social and health consequences of systemic transformations in China, including collapse of the urban work-unit system, resurgence of infectious disease, and implementation of the One-Child Policy. Dean's Teaching Fellowship; Cross listed with East Asian Studies, Public Health and International Studies			
AS.230.346	01	S		**Contemporary Economic Sociology of Latin America** *von der Heydt-Coca, Magda Zonia* This course will offer an overview of Latin America's economic reality as an intertwined process of economic and political domestic factors within the constraints of the world economy. Latin American development will be analyzed from ahistorical perspective. The first half of the semester the course will focus on the analysis of the economic developmental patterns starting in the middle of the 19thcentury to the populist era in the middle of the 20thcentury. In the second half of the semester, we will analyze in depth the contemporary neoliberal approach to development. Globalization is the force that drives economic, social and political processes in Latin America. The course will include case studies as well the social conflicts generated by the increasing polarization of the society. Students will be exposed to important sociological theories. Cross-listed with the Program in Latin American Studies and International Studies. Fulfills Economics requirement fo IS GSCD students only.	3.00	25	TTh 10:30-11:45AM
AS.230.356	01	S		**Contemporary African Social Movements** *Scully, Benjamin Thomas*	3.00	20	TTh 3:00-4:15PM

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is a survey of contemporary social movements in sub-Saharan Africa. The course will begin with an introduction to social movement theory. Subsequent weeks will each focus on a different type of movement (e.g. independence movements, labor movements, women's movements, environmental movements, etc.) The limited coverage of African issues in the US media tends to focus on either catastrophes or on development projects that are driven by international NGOs and the governments of northern countries. Through this course, students will gain a clear understanding of the broad range of actions that African civil society is using to address social problems throughout the continent. Materials used will include academic analysis of movements, writings by movement participants themselves, and films. The course will also introduce students to the most widely used social movement theories. Because these theories have been largely developed by social scientists in northern countries, the students will be asked to assess their applicability to African movements. Through this critical application of social theory, students will investigate the specific possibilities and constraints facing social and political actors in contemporary Africa. Cross listed with Dean's Teaching Fellowship, International Studies (CP) and Africana Studies.			
AS.230.362	01	S	W	**Migration & Development** *Agarwala, Rina* This course focuses on the relationship between international migration and development. The course first introduces theories of international migration, immigrant integration, and international development. Building on this foundation, we then examine how immigrants interact with their homeland and how sending country governments tap their diaspora t0 improve development outcomes. Cross-listed with International Studies (CP, IR) Fulfills Economics requirement for IS GSCD track students only.	3.00	30	M 3:00-5:30PM
AS.230.366	01	S	W	**From Habeas Corpus to Eminent Domain: Urban Development and Urban Planning in Comparative-Historical Perspective** *Pasciuti, Daniel Steven* This course offers a broad survey of urban development in the United States by examining both the intended and unintended consequences of urban planning. Using a comparative-historical framework, issues of power, conflict, representation, participation, and planning within urban development and the American city will be addressed and critiqued with specific reference to Baltimore. Cross listed with International Studies (AP). Fufills History requirement for IS GSCD track students only.	3.00	20	MW 3:00-4:15PM

Study of Women, Gender, & Sexuality

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.010.327	01	H	W	**The Harem and the Veil: Space and Gender in the Islamic World** *Brown, Rebecca Mary* This course explores the constructed imagery of the harem and the veil in relation to politics and visual culture in the Middle East, North Africa, India, and Euro-America. Topics will include: Ottoman palace architecture, Orientalist painting, mandating/banning the veil, Islamic feminisms. We will address visual culture broadly, including advertising, architecture, contemporary art, film, news media.	3.00	15	T 3:00-5:30PM
AS.060.201	01	H		**The Nineteenth Century British Novel** *Rosenthal, Jesse Karl* Reading major novelists from the nineteenth century including Austen, C. Brontë, Dickens, Eliot, Hardy, and Conrad. We will pay attention to formal conventions, and relation to social and historical context.	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.201	02	H		**The Nineteenth Century British Novel**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.201	03	H		**The Nineteenth Century British Novel**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.060.201	04	H		**The Nineteenth Century British Novel**	3.00	20	MW 10:00-10:50AM; F 10:00-10:50AM
AS.061.397	01	H		**French Masculinities** *Mason, Laura* Examines changing ideals of masculinity in France after 1960 as they found expression on film, rooting the work of iconic stars and directors in their cultural, political and historical contexts.	3.00	18	Th 1:30-3:50PM; W 4:30-7:00PM
AS.070.304	01	HS	W	**Child Adoption and Family Making** *Reyes Kipp, Anaid Citlalli* Dean's Teaching Fellowship Course. The course takes child adoption as a starting point to critically explore how kinship and family are connected to legal practices, technological innovations, and broader historical, political, and socio-economic processes. Cross List: WGS, PLAS.	3.00	15	M 4:00-6:20PM
AS.100.424	01	HS	W	**Women & Modern Chinese History** *Meyer-Fong, Tobie* This course examines the experience of Chinese women, and also how writers, scholars, and politicians (often male, sometimes foreign) have represented women's experiences for their own political and social agendas. Cross listed with East Asian Studies.	3.00	20	T 1:30-3:30PM
AS.100.426	01	HS	W	**Popular Culture in Early Modern Europe** *Marshall, John W* Witchcraft, magic, carnivals, riots, folk tales, gender roles; fertility cults and violence especially in Britain, Germany, France, and Italy.	3.00	25	TTh 10:30-11:45AM
AS.100.498	01	HS	W	**Hist-Family & Gender-Us** *Ditz, Toby L* Topics include: history of emotions; politics of sexuality and marriage; impact of race, ethnicity, and class on family life; women and gender inequality. Primarily colonial era through the early twentieth century, with some attention to contemporary politics of family, gender, and sexuality.	3.00	18	MW 12:00-1:15PM

Study of Women, Gender, & Sexuality

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.190.368	01	S		**Pluralism** *Chambers, Samuel Allen* Previous course in political theory or permission of instructor This seminar will explore the theory and politics of pluralism: from European debates over religious tolerance to American debates over constitutional founding; from liberal political philosophy to radical democracy. Authors may include Bentley, Dahl, Locke, Madison, Ranciere, Rawls, Young	3.00		T 1:30-3:50PM
AS.200.204	01	S	W	**Human Sexuality** *Kraft, Chris S* Juniors and Seniors only within the following majors/minors: Behavioral Biology, Biology, Neuroscience, Psychological & Brain Sciences, Public Health, and the Study of Women, Gender, & Sexuality. All registration will be done during the normal registration period and you must meet all requirements to register. Course focuses on sexual development, sexuality across the lifespan, gender identity, sexual attraction and arousal, sexually transmitted disease, and the history of commercial sex workers and pornography. Formerly taught as 200.302	3.00	25	T 12:00-2:20PM
AS.200.204	02	S	W	**Human Sexuality**	3.00	25	T 9:00-11:20AM
AS.200.317	01	S		**Interpersonal Relations** *Drigotas, Stephen M* Prereq: 200.133 Open to Psychology and Behavioral Biology majors only. This course will investigate interpersonal processes ranging from attraction and courtship to relationship functioning and distress.	3.00	30	MW 1:30-2:45PM
AS.211.237	01	H		**Literature and Medicine** *Strowick, Elisabeth* Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).	3.00	25	MW 12:00-1:15PM
AS.213.237	01	H		**Literature and Medicine** *Strowick, Elisabeth*	3.00	25	MW 12:00-1:15PM

Study of Women, Gender, & Sexuality

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Taught in English. The course will analyze literary representations of illness as well as explore interfaces between literary and medical knowledge in more general ways. Both literature and medicine can be considered semiotics as they deal with the study of signs; further, both are invested in interpretation. We will analyze the relation between literature and madness, explore “illness as metaphor” (Susan Sontag) and discuss case studies in relation to literary genres (for example, Freud is surprised to notice that his studies on hysteria read like novellas). As prominently depicted in Thomas Bernhard’s "In the Cold" and theoretically analyzed by Michel Foucault, the course will further address the nexus between medical institutions and power. Readings will include: Antonin Artaud, Thomas Bernhard, Georg Büchner, Michel Foucault, Sigmund Freud, Henry James, Franz Kafka, Thomas Mann, Daniel Paul Schreber, Susan Sontag, etc. Films: "Philadelphia" (Jonathan Demme, 1993), "Melancholia" (Lars von Trier, 2011).			
AS.230.150	01	S		**Issues in International Development** *Agarwala, Rina* Freshmen and Sophomores only. This course will provide an undergraduate level introduction to the study and practice, as well as the successes and failures, of international development. Students will be introduced to the various theoretical frameworks used to explain underdevelopment. Students will also explore the practice of development since the 1950s by examining specific strategies employed in Latin America, South Asia, East Asia, and Africa. Using a variety of country-specific case studies, students will have the opportunity to apply the theoretical and practical frameworks learned in the class to assess the successes and failures of real-life cases. Fufills Economics requirement for IS GSCD track students only.	3.00	30	W 1:30-3:20PM; F 1:30-2:20PM
AS.230.150	02	S		**Issues in International Development**	3.00	30	W 1:30-3:20PM; F 2:30-3:20PM
AS.230.255	01	S		**Men and Women in Society** *McDonald, Katrina Bell* This course will explore what it means to be male or female through academic writings, fiction, and film. It will examine how genders are defined by individuals, cultures, and institutions, and how those meanings shape everyday life for men and women. Power, inequality, and intersections with race-ethnicity, class, and sexuality will be a primary focus. Theories of gender addressed will include those related to masculinity, social psychology, feminism, and intersectionality. Though the course will primarily consider the United States, gender in other countries and cultures will also be addressed. Cross-listed with WGS.	3.00	30	TTh 10:30-11:45AM
AS.290.420	01	S	W	**Human Sexual Orientation** *Kraft, Chris S*	3.00	25	T 3:00-5:30PM

Study of Women, Gender, & Sexuality

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Limited to Juniors & Seniors with PBS, Neuroscience, Public Health, Cog. Sci., Behaviorial Biology, and Biology majors, or Juniors and Seniors with PBS or Women's Studies minors. This course will examine the historical and current theories of sexual orientation and sexual variation development by examining the biological, psychological and social contributing factors that influence the development of sexual orientations and variations along with treatment and modification of problematic sexual behaviors. Cross-listed with Psychological & Brain Sciences and Studies of Women, Gender, and Sexuality			
AS.362.204	01	H	W	**Women in African History** *Romero, Patricia* Selected readings written by or about notable African women from the 17th century to the present. Themes explored include slavery, power and religion, economics, health and politics.	3.00	15	Th 2:00-4:30PM
AS.363.230	01	HS		**Life, Vitality, Affect: History of Science and Sexuality** *McGrath, Larry Sommer* What is the relationship between biology and sexual identity? Feminists have until recently shunned answering this question, insisting instead on the cultural and linguistic construction of sexuality. In this course, we will investigate the history of the "turn to affect," which has overthrown barriers between science and identity, biology and culture.	3.00	15	TTh 10:30-11:45AM
AS.363.243	01	HS		**Poetics and Politics of Sex** *Gies, Nathan Alan* On Publics and Privates. Why shouldn't sex be public? How we answer depends, in the first place, on what we mean by "sex" and by "public" -- both of which turn out to be quite complex terms. This course examines the way the divide between public and private is made and remade through and with regard to sexual bodies, acts, and desires. In other words: we will unpack and investigate each of the key terms of our title – "politics," "poetics," and "sex." Topics include emotions, coming out and the closet, pregnancy and abortion, the home, marriage and the family, work, and sex acts.	3.00	15	TTh 9:00-10:15AM
AS.363.260	01	HS		**Gender, Citizenship, and Politics** *Denman, Derek Scott* This course examines the role of gender in theories of citizenship. It asks how the concept of gender frames thinking on equality, sovereignty, militarism, and imperialism. Readings will include Machiavelli, Pateman, Foucault, and Butler.	3.00	15	MW 3:00-4:15PM
AS.363.417	01	HS		**Working for Social Justice in Contemporary Urban Space (Internship/Practicum)** *Gottbreht, Thomas Scott*	4.00	15	T 4:00-6:30PM

Study of Women, Gender, & Sexuality

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Academic reflection is applied to students' advocacy work in public health and/or social justice. Students intern for 4 hours/week, and the course brings these real-world experiences into a seminar format. Class discussions focus on the roles gender and sexuality play in the context of urban empowerment, in particular struggles to resist and overcome what has come to be known as "the feminization of poverty," that is, the increasingly disproportionate share that women and sexual minorities bear of the burdens of poverty. Departmental approval required.			
EN.570.110	01	HS		**Introduction to Engineering for Sustainable Development** *Schoenberger, Erica* For engineering students who want to work on problems of poverty, and social and environmental dislocation, this course introduces major debates about development and explores cases of engineering interventions in developing countries to identify factors that shape success in achieving project goals and avoiding undesirable outcomes.	3.00	50	TTh 1:30-2:45PM

Theatre Arts & Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.225.300	01	H		**Contemporary Theatre & Film** *Astin, John* An introduction to the performing arts, including an overview of theatre history, acting styles and the interaction of art and society. A personal view from inside.	3.00	50	TTh 12:00-1:15PM
AS.225.302	01	H		**Acting & Directing Workshop II** *Astin, John* Prereq: Workshop I. The Sanford Meisner repetition exercises are explored in detail. They form the basis of Workshop II. The Uta Hagen exercises are also pursued. As in Workshop I, the principal classroom activities will consist of scene work, exercises, lectures, and discussion. Some rehearsal will also take place during school hours. It is expected that substantial out-of-class time be spent on rehearsals and exercises.	3.00	12	TTh 3:00-4:15PM
AS.225.303	01	H		**Acting or Directing Workshop III** *Astin, John* Prereqs: Two acting courses. Special attention is given to the development of spontaneity and emotional freedom using the principles of Workshops I and II. Hands on work with John Astin's "The Process" and the second Silverberg workbook are employed, along with the Uta Hagen text. Boleslavsky and Michael Chekhov are introduced. The Clurman, Meisner, Stanislavsky and Strasberg approaches are included. Substantial out of class time is required.	3.00	12	W 1:30-4:00PM
AS.225.308	01	H		**Shakespeare in Performance** *Glossman, James* The techniques and craft of following a Shakespearean text directly into character and action. Students will work with a selection of Shakespeare's plays --- Hamlet, Romeo and Juliet, and Cymbeline --- in exploring specific ways in which the power of the lines can be translated dynamically and immediately into vocal and physical performance. This course can be repeated for credit, because it covers different topics. (Some background in the acting sequence is encouraged).	3.00	15	M 6:00-8:30PM
AS.225.310	01	H		**Stagecraft** *Roche, William C* Permission Required. A hands-on approach to the technical and theoretical elements of production. Meets in the Merrick Barn Scene Shop and Classroom.	3.00	6	TTh 10:30-11:45AM
AS.225.323	01	H		**Design for the Stage** *Roche, William C* The fundamentals of stage design, with an emphasis on process, including script analysis, research, conceptualization, and implementation, from the first reading of the play to opening night, along with an overview of theatre architecture from the Greeks to the current day and into our imagined future.	3.00	15	MW 12:00-1:15PM
AS.225.324	01	H	W	**Adaptation for the Stage** *Martin, Joseph H*	3.00	10	W 3:00-5:30PM

Theatre Arts & Studies

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				For aspiring playwrights, dramaturgs, and literary translators, this course is a workshop opportunity in learning to adapt both dramatic and non-dramatic works into fresh versions for the stage. Students with ability in foreign languages and literatures are encouraged to explore translation of drama as well as adaptation of foreign language fiction in English. Fiction, classical dramas, folk and fairy tales, independent interviews, or versions of plays from foreign languages are covered.			
AS.225.328	01	H	W	**The Existential Drama: Philosophy and Theatre of the Absurd** *Martin, Joseph H* Existentialism, a powerful movement in modern drama and theatre, has had a profound influence on contemporary political thought, ethics, and psychology, and has transformed our very notion of how to stage a play. Selected readings and lectures on the philosophy of Kierkegaard, Nietszche, Camus and Sartre -- and discussion of works for the stage by Sartre, Ionesco, Genet, Beckett, Albee, Pinter, Athol Fugard (with Nkani & Nshone), Heiner Müller and the late plays of Caryl Churchill. Opportunities for projects on Dürrenmatt, Frisch, Havel, Witkiewicz, and Mrozek.	3.00	15	M 3:00-5:30PM
AS.225.329	01	H		**Acting and Directing Musical Theatre** *Denithorne, Margaret* Musical Theatre is a unique form of theatrical expression that requires special skills of its actors and directors. In this course, students will study the form and structure of musicals as they apply to acting and directing. Students will direct and perform musical numbers as well as book scenes from classic and contemporary American musicals.	3.00	15	T 6:00-8:30PM
AS.225.346	01	H		**Creative Improvisation** *Denithorne, Margaret* An exploration of the imagination and the senses using basic techniques of improvisation: exercises, conflict resolution, ensemble building, and theatre games. Texts: Spolin, Johnstone, LaBan and Feldencreis. Open to all students.	3.00	20	T 3:00-5:30PM
AS.225.346	02	H		**Creative Improvisation**	3.00	20	Th 3:00-5:30PM

Writing Seminars

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.220.105	01	H	W	**Fiction Poetry Writing I** *Kanakia, Rahul H* A course in the arts of realist fiction and traditional verse, with reading in American literature, most recently: Eudora Welty, Vladimir Nabokov, Henry James, Donald Justice, Robert Frost and Gwendolyn Brooks. Students will learn to read as writers; they will compose short stories and poems of their own. Classes meet two or three times a week with a day set aside for a writing workshop. This course is part one of the year-long Introduction to Fiction and Poetry, and must be taken before 220.106	3.00	17	MWF 9:00-9:50AM
AS.220.105	02	H	W	**Fiction Poetry Writing I** *Grasser, John P*	3.00	17	MWF 10:00-10:50AM
AS.220.105	03	H	W	**Fiction Poetry Writing I** *Hofmann, Richard Joseph*	3.00	17	MWF 10:00-10:50AM
AS.220.105	04	H	W	**Fiction Poetry Writing I** *Stintzi, Daniel Patrick*	3.00	17	MWF 10:00-10:50AM
AS.220.105	05	H	W	**Fiction Poetry Writing I** *McNamara, Nathan Scott*	3.00	17	MWF 11:00-11:50AM
AS.220.105	06	H	W	**Fiction Poetry Writing I** *Washatka, Nathaniel William*	3.00	17	MWF 11:00-11:50AM
AS.220.105	07	H	W	**Fiction Poetry Writing I** *Morton, Matthew Travis*	3.00	17	MWF 11:00-11:50AM
AS.220.105	08	H	W	**Fiction Poetry Writing I** *Greer, Songmuang Somerset*	3.00	17	MWF 12:00-12:50PM
AS.220.105	09	H	W	**Fiction Poetry Writing I** *Heney, Julia Lynn*	3.00	17	MWF 12:00-12:50PM
AS.220.105	10	H	W	**Fiction Poetry Writing I** *Thompson, Elizabeth MacKelvie*	3.00	17	MWF 12:00-12:50PM
AS.220.105	11	H	W	**Fiction Poetry Writing I** *McDonald, Robert Charles*	3.00	17	TTh 9:00-10:15AM
AS.220.105	12	H	W	**Fiction Poetry Writing I** *Robinson, Katherine A R*	3.00	17	TTh 10:30-11:45AM
AS.220.105	13	H	W	**Fiction Poetry Writing I** *Parker, Emily Kate*	3.00	17	TTh 10:30-11:45AM
AS.220.105	14	H	W	**Fiction Poetry Writing I** *Robinson, Katherine A R*	3.00	17	TTh 12:00-1:15PM
AS.220.105	15	H	W	**Fiction Poetry Writing I** *Takacs, Joselyn Whitney*	3.00	17	TTh 10:30-11:45AM
AS.220.105	16	H	W	**Fiction Poetry Writing I** *Creighton, Alexander Louis*	3.00	17	TTh 12:00-1:15PM
AS.220.105	17	H	W	**Fiction Poetry Writing I** *Slovak, Jocelyn Marie*	3.00	17	MWF 11:00-11:50AM
AS.220.106	01	H	W	**Fiction Poetry Writing II** *Phinney, Charles L* A course in the counter-traditional arts of anti-realist fiction, free verse, and the prose poem, with readings in 20th Century world literature (Virginia Woolf, Franz Kafka, Italo Calvino, Francis Ponge, William Carlos Williams, Russell Edson). This course will follow the format of 220.105, IFP I, and should be taken after the completion of 220.105. Prereq: 220.105 Limit 17 per section This course is a prerequisite for most upper level courses.	3.00	17	MWF 9:00-9:50AM
AS.220.106	03	H	W	**Fiction Poetry Writing II**	3.00	17	MWF 10:00-10:50AM

Writing Seminars

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
AS.220.106	04	H	W	**Fiction Poetry Writing II** *Burke, Amber E*	3.00	17	MWF 10:00-10:50AM
AS.220.106	05	H	W	**Fiction Poetry Writing II** *Crockford, Petrina*	3.00	17	MWF 11:00-11:50AM
AS.220.106	06	H	W	**Fiction Poetry Writing II** *Burke, Amber E*	3.00	17	MWF 11:00-11:50AM
AS.220.106	07	H	W	**Fiction Poetry Writing II** *Parr, Katherine*	3.00	17	MWF 11:00-11:50AM
AS.220.106	08	H	W	**Fiction Poetry Writing II** *Crockford, Petrina*	3.00	17	MWF 12:00-12:50PM
AS.220.106	09	H	W	**Fiction Poetry Writing II** *Siskel, Callie Gray*	3.00	17	MWF 12:00-12:50PM
AS.220.106	11	H	W	**Fiction Poetry Writing II** *Kirby, Gwen Erin*	3.00	17	TTh 9:00-10:15AM
AS.220.106	12	H	W	**Fiction Poetry Writing II** *Sender, Courtney R*	3.00	17	TTh 10:30-11:45AM
AS.220.106	13	H	W	**Fiction Poetry Writing II** *Levitz, Eric Kalman*	3.00	17	TTh 10:30-11:45AM
AS.220.106	14	H	W	**Fiction Poetry Writing II** *Sender, Courtney R*	3.00	17	TTh 12:00-1:15PM
AS.220.106	15	H	W	**Fiction Poetry Writing II** *Levitz, Eric Kalman*	3.00	17	TTh 12:00-1:15PM
AS.220.106	16	H	W	**Fiction Poetry Writing II** *Allen, Austin Morrow*	3.00	17	TTh 12:00-1:15PM
AS.220.106	17	H	W	**Fiction Poetry Writing II**	3.00	17	TTh 10:30-11:45AM
AS.220.108	01	H	W	**Introduction to Fiction & Nonfiction** *Cavanaugh-Simpson, Joanne* A course in realist fiction and nonfiction, with readings by Eudora Welty, Vladimir Nabokov, Henry James; George Orwell, Beryl Markham and Truman Capote. Students compose short stories and essays with attention to literary models. IFN I can be substituted for IFP I.	3.00	17	T 6:00-8:30PM
AS.220.146	01	H	W	**Introduction to Science Writing** *Calhoun, Kelsey M. K.* Science writing is science written in plain English and told as a story. Students research, write, edit others, rewrite. They also analyze published stories for structure, substance, accessibility, and clarity.	3.00	15	F 1:30-3:50PM
AS.220.146	02	H	W	**Introduction to Science Writing** *Mendoza, Jean P*	3.00	15	F 1:30-3:50PM
AS.220.200	01	H		**Introduction to Fiction** *Klam, Matthew* Prereq: 220.105 and 220.106; Permission required. A study in the reading and writing of short narrative with focus on basic techniques of subject, scene, beginnings and endings. Students do weekly sketches, present story analyses, and write a complete story for workshop critique. Parallel readings from such masters of the form as Henry James, James Joyce, Ivan Turgenev, and others	3.00	15	W 3:00-5:20PM
AS.220.200	02	H		**Introduction to Fiction** *Davies, Tristan*	3.00	15	Th 3:00-5:20PM
AS.220.201	01	H		**Introduction to Poetry Writing** *Smith, David J*	3.00	15	M 2:00-4:20PM

Writing Seminars

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Perm. Req'd. - Prereqs: AS.220.105 AND AS.220.106 - A study of the fundamentals and strategies of poetry writing. This course combines analysis and discussion of traditional models of poetry with workshop critiques of student poems and student conferences with the instructor. (Formerly 220.141)			
AS.220.201	02	H		**Introduction to Poetry Writing** *Williamson, Greg W*	3.00	15	W 1:30-3:50PM
AS.220.202	01	H	W	**Introduction to Non-Fiction: Matters of Fact** *Biddle, Wayne* A first course in nonfiction writing, emphasizing how facts can be woven into narrative forms to portray verifiable, rather than imagined, people and events. Students read and discuss model works, then write frequent papers to refine their own style.	3.00	14	W 1:30-3:50PM
AS.220.204	01	H	W	**Introduction to Dramatic Writing: Film** *Scafidi, Steve* Formerly 220.342. Cross-listed with Film & Media Studies	3.00	15	F 1:30-3:50PM
AS.220.316	01	H	W	**Seminar: Opinion Writing** *Kane, Gregory* The study of exposition and argument in literary prose, with exposure to journalistic practices. Instructor will assign topics on which students write essays and subsequently discuss in class and critique for style, grammar, coherence, and effectiveness.	3.00	15	W 7:00-9:20PM
AS.220.337	01	H	W	**Intermediate Dramatic Writing: Film** *Lapadula, Marc* Prereqs: 220.204; Perm. Req'd An intensive workshop focusing on methodology: enhancing original characterization, plot development, conflict, story, pacing, dramatic foreshadowing, the element of surprise, text and subtext, act structure and visual storytelling. Each student is expected to present sections of his/her "screenplay-in-progress" to the class for discussion. The screenplay Chinatown will be used as a basic text.	3.00	15	F 4:30-6:50PM
AS.220.344	01	H	W	**Intermediate Fiction: The Short-Short Story** *Blake, Glenn* A consideration of the short-short story. Students will weekly present in the short-short story form. We will read the following anthologies: Short Shorts, Flash Fiction, Micro Fiction, and Sudden Fiction.	3.00	15	M 3:00-5:20PM
AS.220.376	01	H	W	**Intermediate Fiction: Outdoor Stories** *Roper, Robert* Students will write sketches and stories, in a class organized around readings in classic texts of wilderness encounter. Hawthorne, Tolstoy, Hemingway, Faulkner, Styron, Cormac McCarthy, Kate Chopin, Melville, McGuane, Conrad. Perm. Req'd.	3.00	15	W 3:00-5:20PM
AS.220.378	01	H		**Poetic Forms II** *Williamson, Greg W*	3.00	14	Th 1:30-3:50PM

Writing Seminars

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Perm. Req'd. The course builds on the information and techniques encountered in Poetic Forms I, and uses them in reading and imitating a range of contemporary poets.			
AS.220.380	01	H		**Intermediate Fiction: The Scene** *Blake, Glenn* Prereq: 220.200 Emphasis in writing scenes-the building blocks of fiction-units of action, units of dialogue. Readings will include the stories of Chekhov, Cheever, Hemingway, and Carver.	3.00	15	Th 3:00-5:20PM
AS.220.383	01	H		**Intermediate Fiction: The 20th Century** *Leithauser, Brad* We will look at modern American novellas. Authors will include: Henry James, Edith Wharton, Katherine Anne Porter, John Updike, Steven Milhauser, Truman Capote, Elizabeth Spencer. Frequent short writing assignments, to be discussed in workshop.	3.00	15	W 1:30-3:50PM
AS.220.400	01	H		**Advanced Poetry Workshop** *Salter, Mary Jo* Permission required Prereq: 220.201 The capstone course in poetry writing. Consideration of various poetic models in discussion, primarily workshop of student poems. Students will usually complete a "collection" of up to 15 poems.	3.00	14	W 1:30-3:50PM
AS.220.401	01	H		**Advanced Fiction Workshop** *McGarry, Jean* Registration Restrictions: Permission required. The capstone course in writing fiction, primarily devoted to workshop of student stories. Some assignments, some discussion of literary models, two or three completed student stories with revisions. Completion of Intermediate Fiction is required.	3.00	15	Th 2:00-4:20PM
AS.220.401	02	H		**Advanced Fiction Workshop** *McDermott, Alice*	3.00	15	M 1:30-3:50PM
AS.220.403	01	H		**Readings in Poetry: The Branch Will Not Break** *Scafidi, Steve* Registration Restrictions: Permission required. Readings in Contemporary Poetry. Confession, place, myth and image are the four compass points of American poetry best embodied in the work of James Wright. With the work of Wright at the center of the compass, we will read the Selected Poems of four major living poets and discover how these directions and forces play out over the course of a career.	3.00	15	F 1:30-3:50PM
AS.220.406	01	H	W	**Hard-Boiled Fiction and Film Noir** *Irwin, John T* Students read six novels by Hammett, Chandler, Cain, Burnett, and Woolrich and view seven films made from these novels by Huston, Hawks, Wilder, Dmytryk, Richards, Walsh, and Farrow. Cross-listed with Film and Media Studies. Lab fee $40	3.00	14	M 3:00-6:00PM
AS.220.409	01	H		**Readings in Fiction: Faulkner, Fitzgerald, & Hemingway** *Irwin, John T*	3.00	14	W 3:00-6:00PM

Writing Seminars

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				An examination of the fiction of three American modernist masters in the context of the early 20th century movement in the verbal and visual arts. Not a workshop course.			
AS.220.416	01	H	W	**Readings in Fiction: Five from the Fifties** *Leithauser, Brad* We will examine five American writers who were emerging or thriving in the middle of the 20th century: John Cheever, Flannery O'Connor, Peter Taylor, John Updike, and Vladimir Nabokov. We will read short stories by all five, as well as the following novels: O'Connor's Wise Blood, Updike's Of the Farm, Nabokov's Lolita and Pale Fire.	3.00	15	T 3:00-5:20PM
AS.220.417	01	H	W	**Advanced Nonfiction Workshop** *Biddle, Wayne* Instructor permission required Classes will be devoted to writing and collective editing of factual work of significant length and ambition, including essays, journalistic reports, histories, and biographies.	3.00	15	T 1:30-3:50PM
AS.220.424	01	H	W	**Science as Literature** *Panek, Richard* Class reads the writings of scientists to explore what their words would have meant to them and their readers. Discussion will focus on the shifting scientific/cultural context throughout history. Authors include Aristotle, Copernicus, Galileo, Descartes, Newton, Darwin, Freud, Einstein, Heisenberg, Bohr, Crick and Watson.	3.00	15	T 2:30-5:30PM
AS.225.324	01	H	W	**Adaptation for the Stage** *Martin, Joseph H* For aspiring playwrights, dramaturgs, and literary translators, this course is a workshop opportunity in learning to adapt both dramatic and non-dramatic works into fresh versions for the stage. Students with ability in foreign languages and literatures are encouraged to explore translation of drama as well as adaptation of foreign language fiction in English. Fiction, classical dramas, folk and fairy tales, independent interviews, or versions of plays from foreign languages are covered.	3.00	10	W 3:00-5:30PM
AS.361.316	01	HS		**Caribbean Writing in Shakespeare, V. S. Naipaul, and Alejo Carpentier** *Gonzalez, Eduardo* Readings and polemics concerned with Shakespeare´s play The Tempest (1610-1611) and its postcolonial afterlives; V. S. Naipaul´s novel A House for Mr. Biswas (1961); and Alejo Carpentier´s El siglo de las luces (1962). The socio historical and political contexts of each work and authorship will be considered in depth in terms of dominant notions of writing in current critical theory. Cross-listed with GRLL, English, and Writing Seminars.	3.00	20	M 1:30-3:50PM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.550.111	01	EQ		**Statistical Analysis I** *Staff* Prerequisite: four years of high school mathematics. Students who may wish to undertake more than two semesters of probability and statistics should consider 550.420-430. First semester of a general survey of statistical methodology. Topics include descriptive statistics, probability models, random variables, expectation, sampling, the central limit theorem, classical and robust estimation of location, confidence intervals, hypothesis testing, two-sample problems, introductory analysis of variance, introductory nonparametric methods. Three lectures and a conference weekly. Some use of computing with the Minitab statistical package, but prior computing experience not required.	4.00	35	MWF 1:30-2:20PM; Th 9:00-9:50AM
EN.550.111	02	EQ		**Statistical Analysis I**	4.00	35	MWF 1:30-2:20PM; Th 10:30-11:20AM
EN.550.111	03	EQ		**Statistical Analysis I**	4.00	35	MWF 1:30-2:20PM; Th 12:00-12:50PM
EN.550.111	04	EQ		**Statistical Analysis I**	4.00	35	MWF 1:30-2:20PM; Th 1:30-2:20PM
EN.550.111	05	EQ		**Statistical Analysis I**	4.00	35	MWF 1:30-2:20PM; Th 3:00-3:50PM
EN.550.111	06	EQ		**Statistical Analysis I**	4.00	35	MWF 1:30-2:20PM; Th 4:30-5:20PM
EN.550.112	01	EQ		**Statistical Analysis II** *Torcaso, Fred* Prereq: 550.111 Second semester of a general survey of statistical methodology. Topics include least squares, regression and analysis of variance, correlation, nonparametric methods, analysis of categorical data, contingency tables and chi-square tests, the likelihood concept, and Bayesian inference. Students who may wish to undertake more than two semesters of probability and statistics should strongly consider the 550.420-550.430 sequence.	4.00	30	MWF 12:00-12:50PM; Th 9:00-9:50AM
EN.550.112	02	EQ		**Statistical Analysis II**	4.00	30	MWF 12:00-12:50PM; Th 10:30-11:20AM
EN.550.112	03	EQ		**Statistical Analysis II**	4.00	30	MWF 12:00-12:50PM; Th 12:00-12:50PM
EN.550.112	04	EQ		**Statistical Analysis II**	4.00	30	MWF 12:00-12:50PM; Th 3:00-3:50PM
EN.550.112	05	EQ		**Statistical Analysis II**	4.00	30	MWF 12:00-12:50PM; Th 4:30-5:20PM
EN.550.171	01	Q		**Discrete Mathematics** *Castello, Beryl* Prereq: Four years of high school mathematics Introduction to the mathematics of finite systems. Logic; Boolean algebra; induction and recursion; sets, functions, relations, equivalence, and partially ordered sets; elementary combinatorics; modular arithmetic and the Euclidean algorithm; group theory; permutations and symmetry groups; graph theory. Selected applications. The concept of a proof and development of the ability to recognize and construct proofs are part of the course.	4.00	35	MWF 10:00-10:50AM; Th 3:00-3:50PM
EN.550.171	02	Q		**Discrete Mathematics**	4.00	35	MWF 10:00-10:50AM; Th 4:30-5:20PM
EN.550.211	01	Q		**Probability and Statistics for the Life Sciences**	4.00	20	MWF 1:30-2:20PM; T 9:00-9:50AM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Jedynak, Bruno This is an introduction to statistics aimed at students in the life sciences. The course will provide the necessary background in probability with treatment of independence, Bayes theorem, discrete and continuous random variables and their distributions. The statistical topics covered will include sampling and sampling distributions, confidence intervals and hypothesis testing for means, comparison of populations, analysis of variance, linear regression and correlation. Analysis of data will be done using Excel. Prerequisite: Calculus I			
EN.550.211	02	Q		**Probability and Statistics for the Life Sciences**	4.00	20	MWF 1:30-2:20PM; T 10:30-11:20AM
EN.550.211	03	Q		**Probability and Statistics for the Life Sciences**	4.00	20	MWF 1:30-2:20PM; T 12:00-12:50PM
EN.550.211	04	Q		**Probability and Statistics for the Life Sciences**	4.00	20	MWF 1:30-2:20PM; T 1:30-2:20PM
EN.550.251	01	EQ		**Math Models/Decision Mkg** *Castello, Beryl* Prereq: One semester of calculus This course is an introduction to management science and the quantitative approach to decision making. Our focus will be on deterministic models, in which we assume that all problem parameters are known with certainty. The covered topics may include Linear and Integer Programming, Network Models, Inventory Models (Stationary Demand), Nonlinear Programming, Goal Programming, and Dynamic Programming. We emphasize model development and case studies, using spreadsheets and other computer software. The applications we study occur in manufacturing and transportation systems, as well as in finance and general management.	4.00	25	MWF 11:00-11:50AM; Th 9:00-9:50AM
EN.550.291	01	EQ		**Lin Alg & Diff Equations** *Hur, Youngmi* Prereqs: One year of Calculus, computing experience (AS.110.106 OR AS.110.108) AND (AS.110.107 or AS.110.109) An introduction to the basic concepts of linear algebra, matrix theory, and differential equations that are used widely in modern engineering and science. Intended for engineering and science majors whose program does not permit taking both 110.201 and 110.302.	4.00	30	MWF 9:00-9:50AM; T 1:30-2:20PM
EN.550.291	02	EQ		**Lin Alg & Diff Equations**	4.00	30	MWF 9:00-9:50AM; T 3:00-3:50PM
EN.550.310	01	EQ		**Probability & Statistics for the Physical and Information Sciences & Engineering** *Torcaso, Fred*	4.00	30	MWF 11:00-11:50AM; T 1:30-2:20PM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: one year of calculus. Recommended corequisite: multivariable calculus. - Students cannot receive credit for both 550.310 and 550.311. Students cannot receive credit for 550.310 after having received credit for 550.420 or 550.430. An introduction to probability and statistics at the calculus level, intended for engineering and science students planning to take only one course on the topics. This course will be at the same technical level as 550.311. Students are encouraged to consider 550.420-430 instead. Combinatorial probability, independence, conditional probability, random variables, expectation and moments, limit theory, estimation, confidence intervals, hypothesis testing, tests of means and variances, goodness-of-fit. Prerequisite: one year of calculus. Recommended corequisite: multivariable calculus.			
EN.550.310	02	EQ		**Probability & Statistics for the Physical and Information Sciences & Engineering**	4.00	30	MWF 11:00-11:50AM; T 3:00-3:50PM
EN.550.310	03	EQ		**Probability & Statistics for the Physical and Information Sciences & Engineering**	4.00	30	MWF 11:00-11:50AM; T 4:30-5:20PM
EN.550.311	01	EQ		**Prob/Stat-Bio Sci & Eng** *Staff* Prerequisite: One year of calculus; Corequisite: 110.202 recommended An introduction to probability and statistics at the calculus level, intended for students in the biological sciences planning to take only one course on the topics. This course will be at the same technical level as 550.310. Students are encouraged to consider 550.420-430 instead. Combinatorial probability, independence, conditional probability, random variables, expectation and moments, limit theory, estimation, confidence intervals, hypothesis testing, tests of means and variances, and goodness-of-fit will be covered. Students cannot receive credit for both 550.310 and 550.311. Students cannot receive credit for 550.311 after having received credit for 550.420 or 550.430.	4.00	30	MWF 10:00-10:50AM; T 1:30-2:20PM
EN.550.311	02	EQ		**Prob/Stat-Bio Sci & Eng**	4.00	30	MWF 10:00-10:50AM; T 3:00-3:50PM
EN.550.311	03	EQ		**Prob/Stat-Bio Sci & Eng**	4.00	30	MWF 10:00-10:50AM; T 4:30-5:20PM
EN.550.362	01	EQ		**Intro to Optimization II** *Fishkind, Donniell* Prerequisites: 550.361 and multivariable calculus An introductory survey of optimization methods, supporting mathematical theory and concepts, and application to problems of planning, design, prediction, estimation, and control in engineering, management, and science. Study of varied optimization techniques including linear programming, network-problem methods, dynamic programming, integer programming, and nonlinear programming. Appropriate for undergraduate and graduate students without the mathematical background required for 550.661.	4.00	35	MWF 11:00-11:50AM; T 3:00-3:50PM
EN.550.362	02	EQ		**Intro to Optimization II**	4.00	35	MWF 11:00-11:50AM; T 4:30-5:20PM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.550.371	01	EQ		**Cryptology And Coding** *Fishkind, Donniell* Prerequisites: EN.550.171 (AS.110.204 with permission of instructor), linear algebra, computing experience. A first course in the mathematical theory of secure and reliable electronic communication. Cryptology is the study of secure communication: How can we ensure the privacy of messages? Coding theory studies how to make communication reliable: How can messages be sent over noisy lines? Topics include finite field arithmetic, error-detecting and error-correcting codes, data compressions, ciphers, one-time pads, the Enigma machine, one-way functions, discrete logarithm, primality testing, secret key exchange, public key cryptosystems, digital signatures, and key escrow	4.00	25	MWF 1:30-2:20PM; Th 10:30-11:20AM
EN.550.386	01	EQ		**Sci Computing:Diff Equat** *Eyink, Gregory* Prerequisites: Calculus III, and 550.291 or approved alternative (e.g.,110.201) A first course on computational differential equations and applications. Topics include floating-point arithmetic, algorithms and convergence, root-finding (midpoint, Newton, and secant methods), numerical differentiation and integration, and numerical solution of initial value problems (Runge–Kutta, multistep, extrapolation methods, stability, implicit methods, and stiffness). Theoretical topics such as existence, uniqueness, and stability of solutions to initial-value problems, conversion of higher order/ non-autonomous equations to systems, etc., will be covered as needed. Matlab is used to solve all numerical exercises; no previous experience with computer programming is required.	4.00	35	MWF 12:00-12:50PM; Th 12:00-12:50PM
EN.550.400	01	EQ		**Mathematical Modeling and Consulting** *Lee, Nam H* Prerequisites: (EN.550.310 or EN.550.311 or EN.550.420 or EN.550.430) Creating, analyzing and evaluating statistical and mathematical models using case studies and real world datasets. Project-oriented practice and guidance in modeling techniques, with emphasis on communication of methods and results. Examples drawn from finance, environmental science and and medicine illustrate the data analysis process using exploratory data analysis and standard statistical modeling techniques. Topics include linear and generalized linear models, models for categorical data and time series models. Computation will be emphasized throughout using the R platform.	4.00	40	MW 4:30-5:45PM; Th 9:00-9:50AM
EN.550.420	01	EQ		**Intro To Probability** *Wierman, John Charles*	4.00	40	MWF 1:30-2:20PM; Th 10:30-11:20AM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: (110.106 or 110.108) and (110.107 or 110.109) or AP Credit for Calculus I and II Recommended corequisite: multivariable calculus. Probability and its applications, at the calculus level. Emphasis on techniques of application rather than on rigorous mathematical demonstration. Probability, combinatorial probability, random variables, distribution functions, important probability distributions, independence, conditional probability, moments, covariance and correlation, limit theorems. Students initiating graduate work in probability or statistics should enroll in 550.620. Students can use any of the 6th, 7th or 8th editions of the textbook.			
EN.550.420	02	EQ		**Intro To Probability**	4.00	40	MWF 1:30-2:20PM; Th 12:00-12:50PM
EN.550.426	01	EQ		**Introduction to Stochastic Processes** *Wierman, John Charles* Prereqs: 550.420 and (550.291 or 110.201 or 110.212). Mathematical theory of stochastic processes. Emphasis on deriving the dependence relations, statistical properties, and sample path behavior including random walks, Markov chains (both discrete and continuous time), Poisson processes, martingales, and Brownian motion. Applications that illuminate the theory. Students may not earn credit for both 550.426 and 550.427.	4.00	40	MWF 11:00-11:50AM; T 10:30-11:20AM
EN.550.428	01	Q		**Stochastic Processes and Applications to Finance II** *Athreya, Dwijavanti P* Prerequisites: 550.427. A basic knowledge of stochastic calculus and Brownian motion is assumed. Topics include stochastic differential equations, the Feynman-Kac formula and connections to partial differential equations, changes of measure, fundamental theorems of asset pricing, martingale representations, first passage times and pricing of path-dependent options, and jump processes.	4.00	25	MWF 10:00-10:50AM; T 9:00-9:50AM
EN.550.430	01	EQ		**Intro to Statistics** *Naiman, Daniel Q* Prereqs: 550.420 or approved alternative, and (550.291 or 110.201 110.212). Introduction to the basic principles of statistical reasoning and data analysis. Emphasis on techniques of application. Classical parametric estimation, hypothesis testing, and multiple decision problems; linear models, analysis of variance, and regression; nonparametric and robust procedures; decision-theoretic setting, Bayesian methods.	4.00	30	MW 3:00-4:15PM; Th 10:30-11:20AM
EN.550.430	02	EQ		**Intro to Statistics**	4.00	30	MW 3:00-4:15PM; Th 12:00-12:50PM
EN.550.430	03	EQ		**Intro to Statistics**	4.00	30	Th 3:00-3:50PM; MW 3:00-4:15PM
EN.550.431	01	EQ		**Statistical Methods in Imaging** *Jedynak, Bruno*	3.00	25	TTh 9:00-10:15AM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: (110.202 or 110.211) and (550.310 or 550.311 or 550.420) Some practice of Matlab or R is highly recommended. Denoising, segmentation, texture modeling, tracking, object recognition are challenging problems in imaging. We will present a collection of statistical models and methods in order to address these, including the E.M. algorithm, Maximum Entropy Modeling, Particle filtering, Markov Random Fields and Belief Propagation. Co-listed with 580.466.			
EN.550.434	01	EQ		**Nonparametric Statistics** *Younes, Elie L* Nonparametric, or distribution-free methods for statistical data analysis design statistical decision regions under minimal assumptions on the observed data, avoiding, in particular, making the assumption that their distribution in known, or that it belongs to a specific parametric class (like Gaussian). The course will study the following topics: order statistics, rank-based methods, tests of independence, symmetry, location differences, scale differences and goodness-of-fit, permutation tests with an introduction to the problem of multiple comparisons. Prerequisite: 550.310/311 (strongly recommended: 550.430)	3.00	25	TTh 3:00-4:15PM
EN.550.439	01	EQ		**Time Series Analysis** *Torcaso, Fred* Prereqs: 550.310, 550.311, or equivalent calculus-based probability course, 110.201 or 550.291 and mathematical maturity Time series analysis from the frequency and time domain approaches. Descriptive techniques; regression analysis; trends, smoothing, prediction; linear systems; serial correlation; stationary processes; spectral analysis.	4.00	50	MWF 9:00-9:50AM; Th 10:30-11:20AM
EN.550.445	01	EQ		**Interest Rate and Credit Derivatives** *Audley, David* Prerequisite: EN.550.444 Advances in corporate finance, investment practice and the capital markets have been driven by the development of a mathematically rigorous theory for financial instruments and the markets in which they trade. This course builds on the concepts, techniques, instruments and markets introduced in 550.444. In addition to new topics in credit enhancement and structured securities, the focus is expanded to include applications in portfolio theory and risk management, and covers some numerical and computational approaches.	4.00	50	MW 12:00-1:15PM; F 12:00-12:50PM
EN.550.447	01	EQ		**Quantitative Portfolio Theory and Performance Analysis** *Audley, David*	4.00	40	MW 3:00-4:15PM; T 4:30-5:20PM

Applied Mathematics & Statistics

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites: 550.442 or 550.444 This course focuses on modern quantitative portfolio theory, models, and analysis. Topics include intertemporal approaches to modeling and optimizing asset selection and asset allocation; benchmarks (indexes), performance assessment (including, Sharpe, Treynor and Jenson ratios) and performance attribution; immunization theorems; alpha-beta separation in management, performance measurement and attribution; Replicating Benchmark Index (RBI) strategies using cash securities / derivatives; Liability-Driven Investment (LDI); and the taxonomy and techniques of strategies for traditional management: Passive, Quasi-Passive (Indexing) Semi-Active (Immunization & Dedicated) Active (Scenario, Relative Value, Total Return and Optimization). In addition, risk management and hedging techniques are also addressed.			
EN.550.453	01	EQ		**Mathematical Game Theory** *Castello, Beryl* Mathematical analysis of cooperative and noncooperative games. Theory and solution methods for matrix game (two players, zero-sum payoffs, finite strategy sets), games with a continuum of strategies, N-player games, games in rule-defined form. The roles of information and memory. Selected applications to economic, recreational, and military situations. Prereq: Multivariable Calculus, probability, linear algebra.	4.00	20	MW 1:30-2:45PM; Th 3:00-3:50PM
EN.550.472	01	Q		**Graph Theory** *Zenklusen, Rico* Prereq: Linear Algebra Study of systems of “vertices” with some pairs joined by “edges.” Theory of adjacency, connectivity, traversability, feedback, and other concepts underlying properties important in engineering and the sciences. Topics include paths, cycles, and trees; routing problems associated with Euler and Hamilton; design of graphs realizing specified incidence conditions and other constraints. Attention directed toward problem solving, algorithms, and applications. One or more topics taken up in greater depth.	4.00	25	MWF 12:00-12:50PM; Th 10:30-11:20AM

Biomedical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.520.434	01			**Modern Biomedical Imaging Instrumentation and Techniques** *Tsui, Benjamin* Prereq: 520.432 or 580.472 An intermediate biomedical imaging course covering modern biomedical imaging instrumentation and techniques as applied to diagnostic radiology and other biomedical applications. It includes recent advances in various biomedical imaging modalities, multi-modality imaging and molecular imaging. The course is team taught by experts in the respective fields and provides a broad based knowledge of modern biomedical imaging to prepare students for graduate studies and research in biomedical imaging. Also, the course will offer tours and practical experience with modern biomedical imaging equipments in clinical and research settings.	3.00	22	TTh 9:00-10:15AM
EN.580.112	01	EN		**BME Design Group** *Allen, Robert H* A two-semester course sequence where freshmen work with groups of BME upperclassmen mentors, and learn to use engineering principles to solve design problems that are biological, physiological, and/or medical. Freshmen are expected to use the informational content being taught in calculus, physics, and chemistry and apply this knowledge to the solution of practical problems encountered in biomedical engineering.	3.00	55	TTh 4:30-5:45PM
EN.580.200	01	E		**Introduction to Scientific Computing in BME using Python, Matlab, and R** *Beer, Michael* This course is an introduction to scientific programming and computing designed for first-year students. The aim is to develop core computer skills required to succeed in research. Programming projects are drawn from current biomedical applications within BME. Emphasis is on algorithm development, large scale data analysis, and effective visualization of results, using MATLAB, Python, and R. Prior programming experience is not required.	3.00	100	MW 1:30-2:45PM
EN.580.202	01			**BME in the Real World** *Popel, Aleksander S* Open only to engineering students; A series of weekly lectures to inform students about careers in biomedical engineering and to discuss technological, social, ethical, legal, and economic issues relevant to the profession. Topics include academic careers in biomedical engineering; biomedical engineering in industry (large corporations to sole entrepreneurship); health care delivery; ethical issues; legal issues (patenting, licensing, product liability); standards and government regulations; and economic issues in biomedical engineering industry (start-up companies, global businesses).	1.00	150	M 4:30-5:20PM
EN.580.212	01	EN		**BME Design Group** *Allen, Robert H* Sophomore-level version of 580.111-112. Permission of course directors required	3.00	10	TTh 4:30-5:45PM

Biomedical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.580.222	01	E		**Systems and Controls** *Sarma, Sridevi* Prereq: 171.102 (Physics II) and 110.201(Linear Algebra), 110.302 (Differential equations) or 550.291 (Linear Algebra and Differential Equations) An introduction to linear systems: analysis, stability and control. Topics include first and second order systems, linear time invariant discrete and continuous systems, convolution, Fourier series, Fourier transforms, Laplace transforms, stability of linear systems, input output and state space representation of linear systems, stability, observability, controlability, and PID controller design. .	4.00	35	MW 12:00-1:15PM; F 9:00-9:50AM
EN.580.222	02	E		**Systems and Controls**	4.00	35	MW 12:00-1:15PM; F 10:00-10:50AM
EN.580.222	03	E		**Systems and Controls**	4.00	35	MW 12:00-1:15PM; F 12:00-12:50PM
EN.580.222	04	E		**Systems and Controls**	4.00	35	MW 12:00-1:15PM; F 1:00-1:50PM
EN.580.222	05	E		**Systems and Controls**	4.00	35	MW 12:00-1:15PM; F 1:30-2:20PM
EN.580.222	06	E		**Systems and Controls**	4.00	35	MW 12:00-1:15PM; F 3:00-3:50PM
EN.580.223	01	E		**Models & Simulations** *Popel, Aleksander S* Prereq: 110.201(Linear Algebra), 110.302 (Differential equations) or 550.291 (Linear Algebra and Differential Equations) This course introduces students to modeling and analysis of biological systems. The first portion of the course focuses on linear systems. Topics include harmonic oscillators, pharmacokinetics, reaction-diffusion equation, heat transfer, and fluid flow. The second half of the course focuses on non-linear systems. Topics include iterated maps, bifurcations, chaos, stability of autonomous systems, the Hodgkin-Huxley model, bistability, limit cycles, and the Poincare-Bendixson theorem. The course also introduces students to the Matlab programming language, which allows them to implement the models discussed in class.	4.00	35	MW 3:00-4:15PM; F 10:00-10:50AM
EN.580.223	02	E		**Models & Simulations**	4.00	35	MW 3:00-4:15PM; F 11:00-11:50AM
EN.580.223	03	E		**Models & Simulations**	4.00	35	F 12:00-12:50PM; MW 3:00-4:15PM
EN.580.223	04	E		**Models & Simulations**	4.00	35	MW 3:00-4:15PM; F 1:30-2:20PM
EN.580.223	05	E		**Models & Simulations**	4.00	35	MW 3:00-4:15PM; F 1:30-2:20PM
EN.580.223	06	E		**Models & Simulations**	4.00	35	MW 3:00-4:15PM; F 3:00-3:50PM
EN.580.302	01			**Careers in Biomed Eng.** *Popel, Aleksander S* Junior/Senior Engineers only. See description for 580.202. This course is designed for upperclassmen that wish to meet with weekly speakers to discuss careers issues.	1.00	50	M 4:30-5:20PM

Biomedical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.580.312	01	EN		**BME Design Group** *Allen, Robert H* A two semester course sequence where juniors and seniors work with a team leader and a group of BME freshmen and sophomores, to solve open-ended problems in biomedical engineering. Upperclassmen are expected to apply their general knowledge and experience, and their knowledge in their concentration area, to teach lower classmen and to generate the solution to practical problems encountered in biomedical engineering.	3.00	55	TTh 4:30-5:45PM
EN.580.412	01	E		**BME Design Group** *Allen, Robert H* Senior-level version of 580.311-312. Permission of course directors required	3.00	55	TTh 4:30-5:45PM
EN.580.414	01	E		**Design Team/Team Leader** *Allen, Robert H* A two-semester sequence where leaders direct a team of undergraduate biomedical engineering students in a series of design problems. Prior design team experience and permission of course directors required.	4.00	18	TTh 4:30-5:45PM
EN.580.420	01	EN		**Build-a-Genome** *Bader, Joel S* Prereq: Must understand fundamentals of DNA structure, DNA electrophoresis and analysis, Polymerase Chain Reaction (PCR) and must be either a) Experienced with molecular biology lab work or b) Adept at programming with a biological twist. In this combination lecture/laboratory "Synthetic Biology" course students will learn how to make DNA building blocks used in an international project to build the world's first synthetic eukaryotic genome, Saccharomyces cerevisiae v. 2.0. Please study the wiki www.syntheticyeast.org for more details about the project. Following a biotechnology boot-camp, students will have 24/7 access to computational and wet-lab resources and will be expected to spend 15-20 hours per week on this course. Advanced students will be expected to contribute to the computational and biotech infrastructure.	4.00	8	MWF 5:00-6:20PM
EN.580.422	01	EN		**Systems Bioengineering II** *Wang, Xiaoqin* Prereq: 580.221 (Molecules and Cells), 580.222 (Systems and Controls), 580.223 (Models and Simulations), 110.302 (Differential Equations), 580.421 (Physiological Foundations I). Coreq: 580.424 (Physiological Foundations Laboratory II). A quantitative, model-oriented approach to the study of the nervous system. Topics include functional anatomy of the central and autonomic nervous systems, neurons and networks, learning and memory, structure and function of the auditory and visual systems, motor systems, and neuro-engineering.	4.00	35	MWF 1:30-2:20PM; Th 10:30-11:20AM
EN.580.422	02	EN		**Systems Bioengineering II**	4.00	35	MWF 1:30-2:20PM; Th 10:30-11:20AM
EN.580.422	03	EN		**Systems Bioengineering II**	4.00	35	MWF 1:30-2:20PM; Th 2:00-2:50PM

Biomedical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.580.422	04	EN		**Systems Bioengineering II**	4.00	35	MWF 1:30-2:20PM; Th 2:00-2:50PM
EN.580.424	01			**Systems Bioengineering Lab** *Haase, Eileen B* Coreq: 580.422 A laboratory course in which various physiological preparations are used as examples of problems of applying technology in biological systems. The emphasis in this course is on the design of experimental measurements and on physical models of biological systems.	2.00	36	T 9:00AM-1:00PM; F 9:00-9:50AM
EN.580.424	02			**Systems Bioengineering Lab**	2.00	36	T 1:30-5:20PM; F 9:00-9:50AM
EN.580.424	03			**Systems Bioengineering Lab**	2.00	36	Th 9:00AM-1:00PM; Th 4:30-5:20PM
EN.580.424	04			**Systems Bioengineering Lab**	2.00	36	Th 1:30-4:20PM; Th 4:30-5:20PM
EN.580.425	01	EN		**Ion Channels in Excitable Membranes** *Yue, David T* Prereqs: 580.421 and 580.422 or equivalent. Recommended: 110.201, 110.302, signals and elementary probability. Ion channels are key signaling molecules that support electrical communication throughout the body. As such, these channels are a central focus of biomedical engineering as it relates to neuroscience, computational biology, biophysics, and drug discovery. The course introduces the engineering and molecular strategies used to understand the function of ionic channels. The course also surveys key papers that paint the current picture of how ion channels open and conduct ions. Biological implications of these properties are emphasized throughout. Finally, the course introduces how optical and electrophysiological methods now promise to revolutionize understanding of ionic channels. This course can be seen as a valuable partner of Models of the Neuron (580.439).	3.00	15	MW 3:30-5:00PM
EN.580.442	01	E		**Tissue Engineering** *Elisseeff, Jennifer Hartt* Prereqs: 580.221 or 020.305 and 020.306, 030.205. Recommended 580.441/580.641. This course focuses on the application of engineering fundamentals to designing biological tissue substitutes. Concepts of tissue development, structure and function will be introduced. Students will learn to recognize the majority of histological tissue structures in the body and understand the basic building blocks of the tissue and clinical need for replacement. The engineering components required to develop tissue-engineered grafts will be explored including biomechanics and transport phenomena along with the use of biomaterials and bioreactors to regulate the cellular microenvironment. Emphasis will be placed on different sources of stem cells and their applications to tissue engineering. Clinical and regulatory perspectives will be discussed. Co-listed with 580.642	3.00	40	TTh 9:00-10:15AM
EN.580.452	01	EN		**Cell & Tissue Eng Lab** *Haase, Eileen B*	2.00	8	TF 12:00-2:00PM

Biomedical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This laboratory course will consist of three experiments that will provide students with valuable hands-on experience in cell and tissue engineering. Experiments include the basics of cell culture techniques, gene transfection and metabolic engineering, basics of cell-substrate interactions I, cell-substrate interactions II, and cell encapsulation and gel contraction. - Lab periods are in 2 hour blocks (4-6 or 6-8). However some lectures may need a 4 hour block for a particular lab. $100 lab fee			
EN.580.452	02	EN		**Cell & Tissue Eng Lab**	2.00	8	TF 2:00-4:00PM
EN.580.455	01	E		**Introduction to Orthopaedic Biomechanics** *Allen, Robert H* Prereq: 110.302 This course will cover static and dynamic force in the musculoskeletal systems, joint reactions, soft and hard tissue response to force loads, muscle mechanics, material properties, biomechanical lumped parameter systems, modeling and injury mechanisms. Co-listed with 580.655	3.00	16	TTh 3:00-4:15PM
EN.580.455	02	E		**Introduction to Orthopaedic Biomechanics**	3.00	16	TTh 3:00-4:15PM
EN.580.466	01	EQ		**Statistical Methods in Imaging** *Jedynak, Bruno* Denoising, segmentation, texture modeling, tracking, object recognition are challenging problems in imaging. We will present a collection of statistical models and methods in order to adress these, including the E.M algorithm, Maximum Entropy Modeling, Markov Random Fields, Markov Chain Monte Carlo, Boltzmann Machines and Multilayer Perceptrons. Prerequisites: 110.202 and 550.310/equiv.	3.00	20	MW 3:00-4:15PM
EN.580.473	01	EN		**Modern Biomedical Imaging Instrumentation & Techniques** *Tsui, Benjamin* An intermediate biomedical imaging course covering modern biomedical imaging instrumentation and techniques as applied to diagnostic radiology and other biomedical applications. It includes recent advances in various biomedical imaging modalities, multi-modality imaging and molecular imaging. The course is team taught by experts in the respective fields and provides a broad based knowledge of modern biomedical imaging to prepare students for graduate studies and research in biomedical imaging. Also, the course will offer tours and practical experience with modern biomedical imaging equipment in clinical and research settings. Prereq; EN.520.432 or EN.580.472	3.00	10	TTh 9:00-10:15AM
EN.580.477	01	E		**Advanced Topics in Magnetic Resonance Imaging** *Herzka, Daniel*	3.00	15	TTh 10:30-11:45AM

Biomedical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				An advanced imaging course with in-depth quantitative coverage of topics central to magnetic resonance imaging, ranging from techniques currently used in the radiology practice to new developments at the cutting edge of MRI research. Topics include: steady-state imaging and contrast mechanisms, MRI simulations, RF pulse and coil design, flow imaging and angiography, cardiac imaging, diffusion imaging, functional MRI, parallel imaging, and high-field imaging. As part of the course, students will be expected to read and understand classic and current literature. The course is taught by a team of experts in the respective fields and will provide an excellent foundation for students interested in deep understanding of magnetic resonance imaging. Requirements: Junior/Senior/Grad standing. Basic physics and mathematics, Matlab, Magnetic Resonance in Medicine (580.476/676)			
EN.580.488	01	EN		**Foundations of Computational Biology & Bioinformatics II** *Karchin, Rachel* Prereq: Math through linear algebra and differential equations, EN.580.221 or equiv., EN.600.226 or equiv. This course will introduce probabilistic modeling and information theory applied to biological sequence analysis, focusing on statistical models of protein families, alignment algorithms, and models of evolution. Topics will include probability theory, score matrices, hidden Markov models, maximum likelihood, expectation maximization and dynamic programming algorithms. Homework assignments will require programming in Python. Foundations of Computational Biology I is not a prereq.	3.00	20	MW 4:30-5:45PM
EN.580.491	01	E		**Learning Theory** *Shadmehr, Reza* Prereq: 110.201(Linear Algebra) and 110.302 (Differential Equations). The course introduces the probabilistic foundations of learning theory. We will discuss topics in regression, estimation, optimal control, system identification, Bayesian learning, and classification. Our aim is to first derive some of the important mathematical results in learning theory, and then apply the framework to problems in biology, particularly animal learning and control of action.	3.00	40	MW 3:00-4:15PM
EN.580.492	01	EN		**Build-a-Genome Mentor** *Bader, Joel S* Prereq: Build-a-Genome (580.420). In addition to producing and sequencing DNA segments like regular B-a-G students, mentors will help prepare and distribute reagents, and maintain a Moodle site to track student reagent use and productivity. Mentors will also be expected to mentor specific students who are learning new techniques for the first time, contribute to the computational and biotech infrastructure associated with Build-a-Genome, and pursue at least one independent research project. Co-listed with 020.451	4.00	4	MWF 5:00-6:20PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.660.103	01			**The Promise and Peril of Microfinance** *Rice, Eric* Microcredit, microlending and microfinance are relatively new tools, potentially useful to help alleviate poverty, contribute to local economies, earn a living and make profit. The promise and publicity has generated practices, experiments and businesses worldwide; microcredit even generated a Nobel Prize for Muhammad Yunus and the Grameen Bank in 2006. So too, the spread of the concept has produced excesses and controversy and more recently, scholarship in the practices and ideas. In this course we will explore the theory, practice and possibilities of the ideas with emphasis on both the developing world and western economies. The course uses lecture, discussion, case study and community investigation to explore the content. No audits. Class meets four times: 2/13/13, 2/20/13, 2/27/13, and 3/6/13.	1.00	20	W 3:00-5:45PM
EN.660.105	01	S	W	**Introduction to Business** *Aronhime, Lawrence* This course is designed as an introduction to the terms, concepts, and values of business and management. The course comprises three broad categories: the economic, financial, and corporate context of business activities; the organization and management of business enterprises; and, the marketing and production of goods and services. Topic specific readings, short case studies and financial exercises all focus on the bases for managerial decisions as well as the long and short-term implications of those decisions in a global environment. No audits.	4.00	25	MWF 12:00-12:50PM; T 1:30-2:20PM
EN.660.105	02	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; T 1:30-2:20PM
EN.660.105	03	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; T 3:00-3:50PM
EN.660.105	04	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; W 3:00-3:50PM
EN.660.105	05	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; Th 1:30-2:20PM
EN.660.105	06	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; Th 3:00-3:50PM
EN.660.105	07	S	W	**Introduction to Business** *Quesenberry, Keith*	4.00	25	TTh 12:00-1:15PM; M 1:30-2:20PM
EN.660.105	08	S	W	**Introduction to Business**	4.00	25	TTh 12:00-1:15PM; W 3:00-3:50PM
EN.660.203	01			**Financial Accounting** *Aronhime, Lawrence* The course in Financial Accounting is designed for anyone who could be called upon to analyze and/or communicate financial results and/or make effective financial decisions in a for-profit business setting. No prior accounting knowledge or skill is required for successful completion of this course. Because accounting is described as the language of business, this course emphasizes the vocabulary, methods, and processes by which all business transactions are communicated. The accounting cycle, basic business transactions, internal controls, and preparation and understanding of financial statements including balance sheets, statements of income and cash flows are covered. No audits.	3.00	35	MWF 10:00-10:50AM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.660.203	02			**Financial Accounting** *Leps, Annette*	3.00	35	MW 12:00-1:15PM
EN.660.203	03			**Financial Accounting**	3.00	35	TTh 12:00-1:15PM
EN.660.203	04			**Financial Accounting** *Wright, Gail*	3.00	35	M 6:15-9:00PM
EN.660.250	01			**Principles of Marketing** *Kendrick, Leslie* This course explores the role of marketing in society and within the organization. It examines the process of developing, pricing, promoting and distributing products to consumer and business markets and shows how marketing managers use the elements of the marketing mix to gain a competitive advantage. Through interactive, application-oriented exercises, case videotapes, a guest speaker (local marketer), and a group project, students will have ample opportunity to observe key marketing concepts in action. The group project requires each team to research the marketing plan for an existing product of its choice. Teams will analyze what is currently being done by the organization, choose one of the strategic growth alternatives studied, and recommend why this alternative should be adopted. The recommendations will include how the current marketing plan will need to be modified in order to implement this strategy and will be presented to the instructor in written form and presented to the class. No audits.	3.00	40	MW 12:00-1:15PM
EN.660.250	02			**Principles of Marketing** *Crane, Donna L*	3.00	35	TTh 1:30-2:45PM
EN.660.250	03			**Principles of Marketing** *DeVries, Marci*	3.00	35	TTh 12:00-1:15PM
EN.660.250	04			**Principles of Marketing** *Pennington, Josianne W.*	3.00	35	W 3:30-6:00PM
EN.660.250	05			**Principles of Marketing** *Jones, Theresa Darlene*	3.00	35	T 6:15-9:00PM
EN.660.303	01			**Managerial Accounting** *Leps, Annette* This course introduces management accounting concepts and objectives including planning, control, and the analysis of sales, expenses, and profits. Major topics include cost behavior, cost allocation, product costing (including activity based costing), standard costing and variance analysis, relevant costs, operational and capital budgeting, and performance measurement. Prerequisite: 660.203 Financial Accounting. Note: not open to students who have taken 660.204 Managerial Accounting. No audits.	3.00	30	TTh 10:30-11:45AM
EN.660.308	01	S		**Business Law I** *Fisher, David*	3.00	35	M 6:15-9:00PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is designed to provide students an introduction to legal reasoning and analysis. Content distinguishes forms of business, civil versus criminal law, and agency principles; intellectual property concepts, contract Law, the UCC (Uniform Commercial Code) and consumer protection are explored and discussed in the context of assigned legal cases which are intended to develop a student's ability to analyze and apply law. Prerequisite OR corequisite: 660.105 Introduction to Business. Note: not open to students who have taken 660.205 Business Law I. No audits.			
EN.660.308	02	S		**Business Law I** *Rakes, W Bryan*	3.00	35	T 6:15-9:00PM
EN.660.310	01	H		**Case Studies in Business Ethics** *Franceschini, Mark* This course is designed as a workshop using case studies to introduce students to the ethical concepts that are relevant to resolve moral issues in contemporary business and social settings—both global and personal in nature. Students will learn the reasoning and analytical skills needed to apply ethical concepts to their own decision-making, to identify moral issues involved in the management of specific problem areas in business and society, and to understand the social and natural environments which give rise to moral issues. The course focus is on performance articulated by clear reasoning and effective verbal and written communication concerning ethical issues in business and society. Prerequisite: 660.105 Introduction to Business. Not open to students who have taken 660.231 Case Studies in Business Ethics. No audits.	3.00	30	M 6:15-9:00PM
EN.660.311	01	S		**Law and the Internet** *Sandhaus, Douglas* Sometimes called “Cyber law,” this course uses the case study method to examine some of the most significant and compelling legal aspects, issues, and concerns involved with operating a business enterprise in an Internet environment. Some of the issues likely to be covered include jurisdiction, resolution of online disputes, trademarks, copyright, licenses, privacy, defamation, obscenity, the application of traditional concepts of tort liability to an Internet context, computer crime, information security, taxation, international considerations, and an analysis of other recent litigation and/or statutes. Prerequisite: 660.205/660.308 Business Law I. Note: not open to students who have taken 660.306 Law and the Internet. No audits.	3.00	30	T 6:15-9:00PM
EN.660.321	01		W	**Managing & Marketing Social Enterprises** *Rice, Eric*	3.00	20	T 3:00-5:45PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course focuses on preparing students to engage in and lead social enterprises as we explore the options for creating social value. Using a combination of lecture, case study and project work, we investigate both for-profit and non-profit models for creating social value with special emphasis on the non-profit community. Particular emphasis is placed on the management challenges of social enterprises such as creating and conveying their message, options for dealing with finances, relationships within communities, and methods for building constituencies. Additionally, we address critical issues such as measures of success, scale, replication and failure. The class requires contact with organizations in the community as well as one long weekend away from campus. Prerequisite: 660.105 Introduction to Business or 660.333 Leading Change or 660.220/660.340 Principles of Management. No audits.			
EN.660.331	01			**Leadership in Teams** *Crane, Donna L* Prerequisite: 660.332. This course will allow students to develop the analytical skills needed to effectively lead and work in teams. Students will learn tools and techniques for problem solving, decision-making, conflict resolution, task management, communications, and goal alignment in team settings. They will also learn how to measure team dynamics and performance, and assess methods for building and sustaining high-performance teams. Students will also explore their own leadership, personality and cognitive styles and learn how these may affect their performance in a team. The course will focus on team-based experiential projects and exercises as well as provide opportunities to individually reflect and write about the concepts explored and skills gained throughout the course. No Audits.	3.00	30	TTh 10:30-11:45AM
EN.660.332	01	S	W	**Leadership Theory** *Smedick, William D* Students will be introduced to the history of Leadership Theory from the “Great Man” theory of born leaders to Transformational Leadership theory of non-positional learned leadership. Transformational Leadership theory postulates that leadership can be learned and enhanced. The course will explore the knowledge base and skills necessary to be an effective leader in a variety of settings. Students will assess their personal leadership qualities and develop a plan to enhance their leadership potential. Recommended prerequisite: 660.105 Introduction to Business or 660.220 or 660.340 Principles of Management. No audits.	3.00	30	MWF 12:00-12:50PM
EN.660.336	01	S	W	**Community Engineering: Interdisciplinary Problem Solving** *Rice, Eric*	3.00	32	TTh 12:00-1:15PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				So many big and seemingly intractable problems inhibit progress and diminish quality of life especially in and around urban communities. Surely there are ways to begin to tackle some of these problems, if we approach them from a multi-disciplinary perspective. This course provides that opportunity as students, who work primarily in teams, apply theory and ingenuity to investigate problems, propose solutions or invent devices that address some of these problems. Class time is spent in lecture, discussion, and applied community projects to master content. Time will be spent participating on teams and working in community organizations in addition to class.			
EN.660.340	01			**Principles of Management** *Izenberg, Illysa B* This course introduces the student to the management process. The course takes an integrated approach to management by examining the role of the manager from a traditional and contemporary perspective while applying decision-making and critical-thinking skills to the challenges facing managers in today's globally diverse environment. The course examines the techniques for controlling, planning, organizing resources and leading the workforce. Not open to students who have taken 660.220 Principles of Management. Prerequisite: 660.105 Introduction to Business. No audits.	3.00	35	W 1:30-4:15PM
EN.660.341	01		W	**Business Process and Quality Management** *Reiter, Joshua* This course focuses on both quantitative and qualitative analytical skills and models essential to operations process design, management, and improvement in both service and manufacturing oriented companies. The objective of the course is to prepare the student to play a significant role in the management of a world-class company which serves satisfied customers through empowered employees, leading to increased revenues and decreased costs. The material combines managerial issues with both technical and quantitative aspects. Practical applications to business organizations are emphasized. Prerequisites: 660.105 Introduction to Business or 660.241 IT Management. No audits.	3.00		Th 1:30-4:15PM
EN.660.352	01			**New Product Development** *Agronin, Michael*	3.00	30	M 6:15-9:00PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				New product development is the ultimate interdisciplinary entrepreneurial art, combining marketing, technical, and managerial skills. A successful product lies at the intersection of the user's need, a technical solution, and compelling execution. This class will bootstrap your experience in the art through exercises and team projects. We will examine products and services, consumer and industrial, simple and technologically complex. Case studies will feature primary sources and the instructor's personal experiences as an inventor for a major consumer products company. Topics will span the product development cycle: identifying user needs, cool-hunting, brainstorming, industrial design, prototyping techniques, market research to validate new ideas, and project management -- especially for managing virtual teams and foreign manufacturers. Prerequisite: 660.250 Principles of Marketing. No audits.			
EN.660.354	01			**Consumer Behavior** *Crane, Donna L* This course will explore how and why consumers make choices in the marketplace—the "buy-ology" of their behavior. We will learn the psychological, social, anthropological, and economic underpinnings of consumer behavior as well as the brain chemistry that affects choices in the marketplace. Students will learn how consumer behavior can and is influenced and the sometimes-unintended consequences of marketing campaigns designed to produce a particular behavior. Students will analyze how consumers solve problems, assess tradeoffs and make choices; how they integrate and react to retail surroundings, smells, product displays, brand, pricing strategies, social pressures, market structures and a myriad of other influences and motivations to buy. Students will also explore how marketers incorporate what is known about consumer behavior into advertising and promotional campaigns, market segmentation and positioning, pricing strategies and new product introductions. Student experiential projects will include ethnographic observations and analyses of real-world consumer behavior. Prerequisite: 660.250 Principles of Marketing. No audits.	3.00	30	TTh 12:00-1:15PM
EN.660.404	01	S		**Business Law II** *Fisher, David* Building on the material from Business Law I, topics examined include entrepreneurship, business entities and business formation, principles of agency, real property, personal property, bailments, bankruptcy, secured transactions, employment discrimination, business financing, investor protection, antitrust and environmental law. Prerequisite: 660.308 or 660.205 Business Law I. Not open to students who have taken 660.206 or 660.307 Business Law II. No audits	3.00	35	T 6:15-9:00PM
EN.660.420	01		W	**Marketing Strategy**	3.00	25	TTh 10:30-11:45AM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Kendrick, Leslie This writing intensive course helps students develop skills in formulating, implementing, and controlling a strategic marketing program for a given product-market entry. Using a structured approach to case analysis, students will learn how to make the kinds of strategic marketing decisions that will have a long-term impact on the organization and support these decisions with quantitative analyses. Through textbook readings, students will learn how to identify appropriate marketing strategies for new, growth, mature, and declining markets and apply these strategies as they analyze a series of marketing cases. The supplementary readings, from a broad spectrum of periodicals, are more applied and will allow students to see how firms are addressing contemporary marketing challenges. In addition to analyzing cases individually, each student will be part of a team that studies a case during the latter half of the semester, developing marketing strategy recommendations, including financial projections, and presenting them to the class. Prerequisite: 660.250 Principles of Marketing. No audits.			
EN.660.450	01			**Advertising & Integrated Marketing Communication** *Kendrick, Leslie* (formerly Advertising and Promotion) This course builds on the promotional mix concepts covered in Principles of Marketing (660.250)—advertising, public relations, sales promotion and personal selling. Students will learn how marketers are changing the ways they communicate with consumers and the ways in which promotional budgets are allocated—and how this impacts the development of marketing strategies and tactics. Working with a client (provided by EdVenture Partners) that has chosen this JHU class as its “advertising agency” and an actual budget provided by the firm, the class will form small teams to mirror the functional organization of an actual ad agency (market research, media strategy/planning, copywriting/design, public relations, etc.). Student teams will then develop a promotional plan and corresponding budget to reach the desired target market (JHU undergrads who meet the client’s criteria), implement the plan and then evaluate its effectiveness through pre- and post campaign market research conducted on the target consumer. Prerequisite: 660.250 Principles of Marketing. Note: Not open to students who have taken 660.450 as Advertising and Promotion. No audits.	3.00	40	TTh 12:00-1:15PM
EN.661.110	01		W	**Professional Communication for Science, Business and Industry** *Staff*	3.00	20	TTh 9:00-10:15AM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				(formerly as both Technical Communication and Business Communication) This course teaches students to communicate effectively with a wide variety of specialized and non-specialized audiences. Projects include production of resumes, cover letters, proposals, instructions, reports, and other relevant documents. Class emphasizes writing clearly and persuasively, creating appropriate visuals, developing oral presentation skills, working in collaborative groups, giving and receiving feedback, and simulating the real world environment in which most communication occurs. Not open to students who have taken 661.110 as Technical Communication or 661.120 Business Communication. No audits.			
EN.661.110	02		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 10:30-11:45AM
EN.661.110	03		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 10:30-11:45AM
EN.661.110	04		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 12:00-1:15PM
EN.661.110	05		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 1:30-2:45PM
EN.661.110	06		W	**Professional Communication for Science, Business and Industry** *Quesenberry, Keith*	3.00	20	MW 12:00-1:15PM
EN.661.110	07		W	**Professional Communication for Science, Business and Industry** *Staff*	3.00	20	W 6:15-9:00PM
EN.661.110	08		W	**Professional Communication for Science, Business and Industry**	3.00	20	M 1:30-4:15PM
EN.661.111	01		W	**Professional Communication for ESL Students** *Davis, Laura* This course teaches ESL students to communicate effectively with a wide variety of specialized and non-specialized audiences and will provide ESL-specific help with grammar, pronunciation, and idiomatic expression in these different contexts. Projects include production of resumes, cover letters, proposals, instructions, reports, and other relevant documents. Class emphasizes writing clearly and persuasively, creating appropriate visuals, developing oral presentation skills, working in collaborative groups, giving and receiving feedback, and simulating the real world environment in which most communication occurs. Note: not open to students who have taken 661.110 as Technical Communication or Professional Communication for Science, Business, and Industry or 661.120 Business Communication. Co-listed with 661.611. No audits.	3.00	12	TTh 4:30-5:45PM
EN.661.150	01		W	**Oral Presentations** *Dungey, Kevin R*	3.00	13	M 3:00-5:45PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is designed to help students push through any anxieties about public speaking by immersing them in a practice-intensive environment. They learn how to speak with confidence in a variety of formats and venues - Including extemporaneous speaking, job interviewing, leading a discussion, presenting a technical speech, and other relevant scenarios. Students learn how to develop effective slides that capture the main point with ease and clarity, hone their message, improve their delivery skills, and write thought-provoking, well-organized speeches that hold an audience's attention. No audits.			
EN.661.150	02		W	**Oral Presentations**	3.00	13	M 6:15-9:00PM
EN.661.150	03		W	**Oral Presentations** *Reiser, Julie*	3.00	13	T 1:30-4:15PM
EN.661.150	04		W	**Oral Presentations** *Heiserman, Jason*	3.00	13	T 4:30-7:15PM
EN.661.150	05		W	**Oral Presentations** *Sheff, Pamela*	3.00	13	W 1:30-4:15PM
EN.661.150	06		W	**Oral Presentations** *O'Donnell, Charlotte Alyssa*	3.00	13	W 5:00-7:45PM
EN.661.150	07		W	**Oral Presentations** *Kulanko, Andrew*	3.00	13	Th 1:30-4:15PM
EN.661.150	08		W	**Oral Presentations**	3.00	13	Th 5:00-7:45PM
EN.661.151	01		W	**Oral Presentations for ESL** *Davis, Laura* This course is designed to help students push through any anxieties about public speaking by immersing them in a practice-intensive environment. They learn how to speak with confidence in a variety of formats and venues - Including extemporaneous speaking, job interviewing, leading a discussion, presenting a technical speech, and other relevant scenarios. Students learn how to develop effective slides that capture the main point with ease and clarity, hone their message, improve their delivery skills, and write thought-provoking, well-organized speeches that hold an audience's attention. Special attention will be placed on diction, pronunciation, tone, pace and emphasis of language. Additional attention also will be given to syntax as well as non-verbal communication patterns. Co-listed with 661.651. No audits.	3.00	13	W 1:30-4:15PM
EN.661.170	01			**Visual Rhetoric** *O'Donnell, Charlotte Alyssa* A course that aims to help students design clearer, more visually engaging graphics for a wide variety of business and technical documents. Students will learn to manage essential principles of graphic design through a variety of graphic (Adobe Creative Suite) and MS Office software. Topics will include logos, letterhead, event posters, brochures, data graphics and some basic web design. No audits.	3.00	15	T 1:30-4:15PM
EN.661.315	01	S	W	**The Culture of the Engineering Profession** *Rice, Eric*	3.00	24	TTh 10:30-11:45AM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				For Engineering sophomores, juniors and seniors or by permission of instructor. This course focuses on building understanding of the culture of engineering while preparing students to communicate effectively with the various audiences with whom engineers interact. Working from a base of contemporary science writing (monographs, non-fiction, popular literature and fiction), students will engage in discussion, argument, case study and project work to investigate: the engineering culture and challenges to that culture, the impacts of engineering solutions on society, the ethical guidelines for the profession, and the ways engineering information is conveyed to the range of audiences for whom the information is critical. Additionally, students will master many of the techniques critical to successful communication within the engineering culture through a series of short papers and presentations associated with analysis of the writings and cases. No audits.			
EN.661.315	02	S	W	**The Culture of the Engineering Profession** *Sheff, Pamela*	3.00	24	TTh 12:00-1:15PM
EN.661.317	01	S	W	**The Culture of the Medical Profession** *Sheff, Pamela* For sophomores, juniors, and seniors or by permission of instructor. This course builds understanding of the culture of medicine as well as the ways in which different strata within society have access to and tend to make decisions about health and health related services while preparing students to communicate effectively with the various audiences with whom medical professionals interact. Working from a base of contemporary science writing (monographs, non-fiction, popular literature and fiction), students engage in discussion, argument, case study and project work to investigate topics such as the medical culture, the ways medicine is viewed by different segments of society, issues associated with access to health care, ethical dilemmas and guidelines for medical decisions, the impacts of medical and engineering solutions on society, decision making within client/patient groups, social and cultural differences that effect behavioral change, and the ways medical information is conveyed to the range of audiences for whom the information is critical. Additionally, students will master many of the techniques critical to successful in communication through a series of short papers and presentations associated with analysis of the writings and cases. No audits.	3.00	24	M 1:30-4:15PM
EN.661.410	01	S	W	**Research Writing for ESL** *Link-Farajali, Denise*	3.00	5	M 6:00-8:45PM

Center for Leadership Education

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				(This course is designed to help ESL writers succeed in writing, editing, and completing a large research project specific to their discipline. This could be a research report, journal article, literature review, dissertation chapter, grant proposal, or other relevant document. The course provided intensive help with grammar, idiomatic phrasing, and overall clarity for writers whose native language is not English. The course includes both individual consultation and group workshops. Undergraduates are required to be conducting research with a faculty member or by special permission of instructor. S/U grading only (students may elect to take this course for a traditional letter grade if their departments require them to do so; students must inform the instructor by the second week of class). Co-listed with 661.610. No audits.			
EN.661.454	01		W	**Blogging, Editing and Copywriting** *Quesenberry, Keith* This course will teach students how to develop, write, and manage content for social media. Students will gain significant experience in both freelance and managerial-level contexts. In this highly experiential course, students will create and market their own blog, solicit and do copywriting for clients, and manage the content creation process for a collaborative class project. The course will emphasize best practices for search engine optimization (SEO), intuitive design, social media metrics, freelance project management skills (querying/soliciting for new work, invoicing, and client retention), and content management strategies appropriate for publishing, marketing, and other relevant environments. Pre-requisite: one writing course in any discipline (professional communication, expository writing, or writing seminars).	3.00	15	TTh 1:30-2:45PM
EN.661.487	01		W	**Advanced Communication Skills for Science and Engineering** *Reiser, Julie* This course helps students build advanced communication skills that are critical for leveraging their academic experience in the "real world." Course emphasizes reporting information, polishing CVs and resumes, presenting conference papers, participating in poster sessions, tailoring information to both specialist and non-specialist audiences, and writing grant proposals for funding. Undergraduates are required to be conducting research with a faculty member or by special permission of instructor. Co-listed with 661.687. No audits.	3.00	15	TTh 12:00-1:15PM

Chemical & Biomolecular Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.540.202	01	E		**Introduction to Chemical & Biological Process Analysis** *Dahuron, Lise* Prereq: 171.101; Coreq: 030.205 Introduction to chemical and biomolecular engineering and the fundamental principles of chemical process analysis. Formulation and solution of material and energy balances on chemical processes. Reductionist approaches to the solution of complex, multi-unit processes will be emphasized. Introduction to the basic concepts of thermodynamics as well as chemical and biochemical reactions.	4.00	35	MWF 1:30-2:20PM; T 3:00-4:50PM
EN.540.202	02	E		**Introduction to Chemical & Biological Process Analysis**	4.00	35	MWF 1:30-2:20PM; Th 4:30-6:00PM
EN.540.203	01	E		**Engr Thermodynamics** *Frechette, Joelle* Prereq: 540.202 Formulation and solution of material, energy, and entropy balances with an emphasis on open systems. A systematic problem-solving approach is developed for chemical and biomolecular process-related systems. Extensive use is made of classical thermodynamic relationships and constitutive equations for one and two component systems. Applications include the analysis and design of engines, refrigerators, heat pumps, compressors, and turbines.	3.00	40	MWF 3:00-3:50PM
EN.540.203	02	E		**Engr Thermodynamics**	3.00	40	MWF 3:00-3:50PM
EN.540.301	01	E		**Kinetic Processes** *Cui, Honggang* Prereqs: 540.203, 540.303 Review of numerical methods applied to kinetic phenomena and reactor design in chemical and biological processes. Homogeneous kinetics and interpretation of reaction rate data. Batch, plug flow, and stirred tank reactor analyses, including reactors in parallel and in series. Selectivity and optimization considerations in multiple reaction systems. Non isothermal reactors. Elements of heterogeneous kinetics, including adsorption isotherms and heterogeneous catalysis. Coupled transport and chemical/biological reaction rates.	3.00	50	MWF 11:00-11:50AM
EN.540.301	02	E		**Kinetic Processes** *Goffin, An*	3.00	50	TTh 10:30-11:45AM

Chemical & Biomolecular Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.540.303	01	EN		**Transport Phenomena I** *Konstantopoulos, K* Coreq: Differential Equations Introduction to the field of transport phenomena. Molecular mechanisms of momentum transport (viscous flow), energy transport (heat conduction), and mass transport (diffusion). Isothermal equations of change (continuity, motion, and energy). The development of the Navier Stokes equation. The development of non isothermal and multi component equations of change for heat and mass transfer. Exact solutions to steady state, isothermal unidirectional flow problems, to steady state heat and mass transfer problems. The analogies between heat, mass, and momentum transfer are emphasized throughout the course.	3.00	120	MWF 9:00-9:50AM
EN.540.306	01	E		**Chem & Bio Separation** *Betenbaugh, Michael J* Prereq: 540.303, 540.202 This course covers staged and continuous-contacting separations processes critical to the chemical and biochemical industries. Separations technologies studied include distillation, liquid-liquid extraction, gas absorption, membrane ultrafiltration, reverse osmosis, dialysis, adsorption, and chromatography. Particular emphasis is placed on the biochemical uses of these processes and consequently on how the treatment of these processes differs from the more traditional approach.	3.00	100	TTh 3:00-4:15PM
EN.540.314	01	E		**Chem Eng Product/Process Design** *Donohue, Marc D* Prereq: 540.311 or 540.313, 540.301 and 540.306 This course guides the student through the contrasting aspects of product design and of process design. Product design concerns the recognition of customer needs, the creation of suitable specifications, and the selection of best products to fulfill the needs. Process design concerns the quantitative description of processes, which serve to produce many commodity chemicals, the estimation of process profitability, and the potential for profitability improvement through incremental changes in the process. Students work in small teams to complete a major project demonstrating their understanding of and proficiency in the primary objectives of the course. Students report several times both orally and in writing on their accomplishments.	4.00	16	MW 1:30-4:15PM
EN.540.314	02	E		**Chem Eng Product/Process Design** *Dahuron, Lise*	4.00	16	TTh 9:00-11:45AM
EN.540.314	03	E		**Chem Eng Product/Process Design**	4.00	16	TTh 1:30-4:15PM
EN.540.314	04	E		**Chem Eng Product/Process Design** *Goffin, An*	4.00	16	WF 10:30AM-1:15PM
EN.540.403	01	E		**Colloids and Nanoparticles** *Bevan, Michael*	3.00	15	TTh 9:00-10:15AM

Chemical & Biomolecular Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Fundamental principles related to interactions, dynamics, and structure in colloidal, nanoparticle, and interfacial systems. Concepts covered include hdrodynamics, Brownian motion, diffusion, sedimentation, electrophoresis, colloidal and surface forces, polymeric forces, aggregation, deposition, and experimental methods. Modern topics related to colloids in nano- science and technology will be discussed throughout the course with frequent references to recent literature. Meets with 540.603			
EN.540.405	01			**The Design of Biomolecular Systems** *Schulman, Rebecca* Reccomended: 540.402; Upper level undergrads. This course covers new topics in the design of systems of biomolecules,w both in vitro and in vivo, for decision making and control. The course will begin with an overview of how logical decision making and control with biomolecules as is achieved in biology and then proceed to consider various strategies of engineering similar systems. The focus of the course will be on systems level principles rather than the biochemistry of molecule design. Topics will include engineering of transcriptional networks and genetic control for logically programming of cells, the design of in vitro mimics of genetic controls, molecular computing and systems aspects of metabolic engineering. The course will also cover quantitative and computational techniques for the simulation and analysis of biomolecular systems. Meets with 540.605	3.00	20	TTh 10:30-11:45AM
EN.540.407	01			**Current Topics in Functional Molecular Assembly** *Cui, Honggang* Instructor permission required. Juniors and Seniors only. This course describes the most recent progress in molecular self-assembly, with a focus on the application aspects of self-assembling materials in medical and energy-related areas. Specifically, the course consists of about twelve lectures covering a broad range of topics, including: principles of static and dynamic molecular assembly, nanomaterials and phase/morphology diagrams of small molecular and macromolecular amphiphiles, self-assembly in biological systems, supramolecular polymers for energy and medicine, key challenges in the fabrication of organic solar cells, and self-healing materials. The class will be taught in a seminar format, with discussions led by graduate students or postdocs.	3.00	10	F 4:30-7:00PM
EN.540.419	01			**Projects in the Design of a Chemical Car** *Dahuron, Lise*	2.00	20	Th 6:00-7:40PM

Chemical & Biomolecular Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 540.418 Ready to put those concepts from class into practice? Members work over the course ofthe semester to design and build a chemically powered vehicle that will compete with other college teams at the American Institute of Chemical Engineers (AIChE) Regional Conference. In this course, the students work in small groups to design and construct the chassis along with chemically powered propulsion and break mechanisms within the constraints of the competition. In addition, students will give oral presentation, write reports, and do thorough safety analysis of their prototypes.			
EN.540.426	01	E		**Biomacromolecules at the nanoscale** *Wirtz, Denis* This course introduces modern concepts of polymer physics at the nanoscale to describe the conformation and dynamics of biological macromolecules such as filamentous actin, microtubule, and nucleic acids. We will introduce scattering techniques, nano-manipulation techniques, as well as nano-rheology applied to the study of polymers for tissue engineering, nanoparticles, and drug delivery applications.	3.00	30	TTh 1:30-2:45PM
EN.540.437	01	EN		**Application of Molecular Evolution to Biotechnology** *Ostermeier, Marc* Prereqs: 020.305 or 580.221 One of the most promising strategies for successfully designing complex biomolecular fuinctions is to exploit nature's principles of evolution. This course provides an overview of the basics of molecular evolution as well as its experimental implementation. Current research problems in evolution-based biomolecular engineering will be used to illustrate principles in the design of biomolecules (i.e. protein engineering, RNA/DNA engineering), genetic circuits and complex biological systems including cells. (Will meet with EN.540.637)	3.00	50	MW 3:00-4:15PM
EN.540.459	01	E		**Bioengineering in Regenerative Medicine** *Gerecht, Sharon* Introduction and in-depth discussion course focused on tissue and stem cell engineering. The course will focus on principles in tissue engineering, mechanisms of regeneration, and stem cell therapies. Topics will include introduction to regenerative medicine, bioreactors and scaffolds in tissue engineering, adult and pluripotent stem cells, engineering the niche, and two sessions will focus on legal and ethical issues. Selected approaches to analyze tissues and stem cell culture will also be discussed. In addition, the course will be integrated with graduate students' presentations on selected topics in stem cell engineering. Meets with 540.659	3.00	30	MW 1:30-2:45PM

Civil Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.560.141	01	EN	W	**Perspectives on the Evolution of Structures** *Schafer, Benjamin* Why do buildings and bridges look the way they do today? Students will be provided the tools to answer this question for themselves through a study of the history of the design of buildings and bridges throughout the world from both engineering and architectural/aesthetic perspectives. Only simple mathematics is required (no calculus). Students will participate in individual and group critique of structures from engineering, architectural, and social points of view.	3.00	100	TTh 3:00-4:15PM
EN.560.202	01	EN		**Dynamics** *Nakata, Narutoshi* Basic principles of classical mechanics applied to the motion of particles, system of particles and rigid bodies. Kinematics: analytical description of motion; rectilinear and curvilinear motions of particles; rigid body motion. Kinetics: force, mass, and acceleration; energy and momentum principles. Introduction to vibration. Includes laboratory experience. Prerequisites: 560.201 or 530.201, 110.109 Calculus II, 171.101 General Physics I.	4.00	8	TTh 10:30-11:45AM; W 2:00-4:00PM
EN.560.202	02	EN		**Dynamics**	4.00	8	TTh 10:30-11:45AM; W 4:00-6:00PM
EN.560.202	03	EN		**Dynamics**	4.00	8	TTh 10:30-11:45AM; Th 4:00-6:00PM
EN.560.202	04	EN		**Dynamics**	4.00	8	TTh 10:30-11:45AM; F 2:00-4:00PM
EN.560.202	05	EN		**Dynamics**	4.00	8	TTh 10:30-11:45AM; F 4:00-6:00PM
EN.560.206	01	E		**Solid Mechanics & Theory of Structures** *Guest, James K* Application of the principles of structural analysis for statically determinant and indeterminant structures (trusses, cables, beams, arches, and frames). Calculation of internal forces and stresses in members and structures. Determination of deflections by equilibrium and energy methods. Analysis of indeterminate structures by flexibility and stiffness methods. Prereq: 560.201or 530.201	4.00	35	Th 1:30-2:45PM; MW 1:30-2:45PM
EN.560.325	01	EN		**Concrete Structures** *Sangree, Rachel H* Principles of behavior of reinforced concrete beams, columns, and slabs, with application to the design of elementary structures are introduced. The ultimate strength and the elastic methods of analysis are used. Prereq: 560.206	3.00	25	MW 12:00-1:15PM
EN.560.330	01	E		**Foundation Design** *De Melo, Lucas T* Application of soil mechanics theory and soil test results to the analysis and design of foundations for structures; retaining walls; embankments; design of pile and shallow footing foundations; slope stability. Prereq: 560.305	3.00	30	W 4:30-7:30PM

Civil Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.560.348	01	E		**Probability & Statistics in Civil Engineering** *Siddiqui, Sauleh A* Development and applications of the analysis of uncertainty, including basic probability, statistics and decision theory, in civil engineering systems. Prereq: 110.109	3.00	162	TTh 9:00-10:15AM
EN.560.380	01	E		**Intro to Ocean Wind Engineering** *Staff* Fundamentals of hydrodynamics, aerodynamics and flow-structure interactions with applications in coastal/ocean engineering and wind engineering. Topics include wind and current past blunt bodies, flow-induced structure vibrations, ocean waves and wave/flood loads, wind field and wind loads, sustainable energy from wind and wave and model testing.	3.00	29	TTh 10:30-11:50AM
EN.560.452	01	E		**Civil Engineering Design II** *Matteo, John* A study of the engineering design process from problem definition to the final design. There are team projects which include written and oral presentations. Requirements: Student must be a senior in Civil Engineering.	3.00	25	F 1:30-4:20PM
EN.560.491	01	EN		**Civil Engineering Seminar I** *Sangree, Rachel H* S/U grading only. Seminar series of speakers on various aspects of civil engineering. Different speakers are invited each semester. Civil engineering undergraduate students must take at least two semesters of seminar; typically completed in junior year.	0.50	50	T 12:00-12:50PM
EN.560.492	01	EN		**Civil Engineering Seminar II** *Sangree, Rachel H* S/U grading only. Seminar series of speakers on various aspects of civil engineering. Different speakers are invited each semester. Civil engineering undergraduate students must take at least two semesters of seminar; typically completed in junior year. Prereq: 560.491	0.50	50	T 12:00-12:50PM
EN.560.493	01	EN		**Civil Engineering Seminar III** *Sangree, Rachel H* S/U grading only. Seminar series of speakers on various aspects of civil engineering. Different speakers are invited each semester. Civil engineering undergraduate students must take at least two semesters of seminar; typically completed in junior year. Prereq: 560.492	0.50	50	T 12:00-12:50PM
EN.560.494	01	EN		**Civil Engineering Seminar IV** *Sangree, Rachel H* S/U grading only. Seminar series of speakers on various aspects of civil engineering. Different speakers are invited each semester. Civil engineering undergraduate students must take at least two semesters of seminar; typically completed in junior year. Prereq: 560.493	0.50	50	T 12:00-12:50PM
EN.560.498	01	E		**Survey of Systems Engineering Tools** *Igusa, Takeru*	3.00	20	TTh 1:30-2:50PM

Civil Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Introduction to analytical tools in the three major functional areas of systems engineering: design, analysis and control. Co-requisite: 560.348 or equivalent course in probability theory.			

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.520.434	01			**Modern Biomedical Imaging Instrumentation and Techniques** *Tsui, Benjamin* Prereq: 520.432 or 580.472 An intermediate biomedical imaging course covering modern biomedical imaging instrumentation and techniques as applied to diagnostic radiology and other biomedical applications. It includes recent advances in various biomedical imaging modalities, multi-modality imaging and molecular imaging. The course is team taught by experts in the respective fields and provides a broad based knowledge of modern biomedical imaging to prepare students for graduate studies and research in biomedical imaging. Also, the course will offer tours and practical experience with modern biomedical imaging equipments in clinical and research settings.	3.00	22	TTh 9:00-10:15AM
EN.580.473	01	EN		**Modern Biomedical Imaging Instrumentation & Techniques** *Tsui, Benjamin* An intermediate biomedical imaging course covering modern biomedical imaging instrumentation and techniques as applied to diagnostic radiology and other biomedical applications. It includes recent advances in various biomedical imaging modalities, multi-modality imaging and molecular imaging. The course is team taught by experts in the respective fields and provides a broad based knowledge of modern biomedical imaging to prepare students for graduate studies and research in biomedical imaging. Also, the course will offer tours and practical experience with modern biomedical imaging equipment in clinical and research settings. Prereq; EN.520.432 or EN.580.472	3.00	10	TTh 9:00-10:15AM
EN.600.104	01	H		**Computer Ethics** *Kosaraju, Sheela* Computer Science majors only Note: Meets every other week. Students will examine a variety of topics regarding policy, legal, and moral issues related to the computer science profession itself and to the proliferation of computers in all aspects of society, especially in the era of the Internet. The course will cover various general issues related to ethical frameworks and apply those frameworks more specifically to the use of computers and the Internet. The topics will include privacy issues, computer crime, intellectual property law -- specifically copyright and patent issues, globalization, and ethical responsibilities for computer science professionals. Work in the course will consist of weekly assignments on one or more of the readings and a final paper on a topic chosen by the student and approved by the instructor.	1.00	20	W 6:00-8:00PM
EN.600.107	01	E		**Intro Programming in Java** *Selinski, Joanne F*	3.00	140	MW 1:30-2:45PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: familiarity with computers This course introduces the fundamental programming concepts and techniques in Java and is intended for all who plan to use computer programming in their studies and careers. Topics covered include control structures, arrays, functions, recursion, dynamic memory allocation, simple data structures, files, and structured program design. Elements of object-oriented design and programming are also introduced. Students without prior exposure are strongly advised to also take 600.108.			
EN.600.108	01	E		**Intro Programming Lab** *Selinski, Joanne F* Coreq: 600.107 Satisfactory/Unsatisfactory only. The purpose of this course is to give novice programmers extra hands-on practice with guided supervision. Students will work in pairs each week to develop working programs, with checkpoints for each development phase.	1.00	16	W 4:30-7:30PM
EN.600.108	02	E		**Intro Programming Lab**	1.00	16	Th 6:00-9:00PM
EN.600.108	03	E		**Intro Programming Lab**	1.00	16	F 1:30-4:30PM
EN.600.120	01	E		**Intermediate Programming** *Froehlich, Peter* Prereq: AP CS, 600.107 or 600.226. This course teaches intermediate to advanced programming, using C and C++. (Prior knowledge of these languages is not expected.) We will cover low-level programming techniques, as well as object-oriented class design, and the use of class libraries. Specific topics include pointers, dynamic memory allocation, polymorphism, overloading, inheritance, templates, collections, exceptions, and others as time permits. Students are expected to learn syntax and some language specific features independently. Course work involves significant programming projects in both languages.	4.00	75	MWF 12:00-1:15PM
EN.600.226	01	EQ		**Data Structures** *Selinski, Joanne F* Prereq: AP CS, 600.107 or 600.120. This course covers the design and implementation of data structures including collections, sequences, trees, and graphs. Other topics include sorting, searching, and hashing. Course work involves both written homework and Java programming assignments.	4.00	75	MWF 3:00-4:15PM
EN.600.271	01	EQ		**Automata & Computation Theory** *Kosaraju, S Rao* This course is an introduction to the theory of computing. Topics include design of finite state automata, pushdown automata, linear bounded automata, Turing machines and phrase structure grammars; correspondence between automata and grammars; computable functions, decidable and undecidable problems, P and NP problems, NP-completeness, and randomization.	3.00	75	TTh 1:30-2:45PM
EN.600.316	01	E		**Database Systems** *Ahmad, Yanif N*	3.00	20	MW 12:00-1:15PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course serves as an introduction to the architecture and design of modern database management systems. Topics include query processing algorithms and data structures, data organization and storage, query optimization and cost modeling, transaction management and concurrency control, high-availability mechanisms, parallel and distributed databases, and a survey of modern architectures including NoSQL, column-oriented and streaming databases. Course work includes programming assignments and experimentation in a simple database framework written in Java. [Systems] Prereq: 600.120 and 600.226. Students may receive credit for 600.316 or 600.416, but not both.			
EN.600.320	01	E		**Parallel Programming** *Burns, Randal* This course prepares the programmer to tackle the massive data sets and huge problem size of modern scientific and enterprise computing. Google and IBM have commented that undergraduate CS majors are unable to "break the single server mindset" (http://www.google.com/intl/en/press/pressrel/20071008_ibm_univ.html). Students taking this course will abandon the comfort of serial algorithmic thinking and learn to harness the power of cutting-edge software and hardware technologies. The issue of parallelism spans many architectural levels. Even ``single server'' systems must parallelize computation in order to exploit the inherent parallelism of recent multi-core processors. The course will examine different forms of parallelism in four sections. These are: (1) massive data-parallel computations with Hadoop!; (2) programming compute clusters with MPI; (3) thread-level parallelism in Java; and, (4) GPGPU parallel programming with NVIDIA's Cuda. Each section will be approximately 3 weeks and each section will involve a programming project. The course is also suitable for undergraduate and graduate students from other science and engineering disciplines that have prior programming experience. [Systems] Prereq: 600.120 and 600.226; 600.333 recommended. Students may receive credit for 600.320 or 600.420, but not both.	3.00	30	MW 4:30-5:45PM
EN.600.325	01	E		**Declarative Methods** *Eisner, Jason*	3.00	20	MWF 3:00-4:15PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 600.226, Calc II. Students can only receive credit for 600.325 or 600.425, not both. Suppose you could simply write down a description of your problem, and let the computer figure out how to solve it. What notation could you use? What strategy should the computer then use? In this survey class, you'll learn to recognize when your problem is an instance of satisfiability, constraint programming, logic programming, dynamic programming, or mathematical programming (e.g., integer linear programming). For each of these related paradigms, you'll learn to reformulate hard problems in the required notation and apply off-the-shelf software that can solve any problem in that notation -- including NP-complete problems and many of the problems you'll see in other courses and in the real world. You'll also gain some understanding of the general-purpose algorithms that power the software. [Analysis]			
EN.600.328	01	E		**Compilers and Interpreters** *Froehlich, Peter* Introduction to compiler design, including lexical analysis, parsing, syntax-directed translation, symbol tables, run-time environments, and code generation and optimization. Students are required to write a compiler as a course project. [Systems] Prereq: 600.120 and 600.226 Co-listed with 600.428	3.00	30	MWF 10:00-10:50AM
EN.600.335	01	E		**Artificial Intelligence** *Mitchell, Benjamin Rees* Prereq: 600.226, 550.171; Recommended: linear algebra, prob/stat. Students can only receive credit for 600.335 or 600.435, not both. Artificial intelligence (AI) is introduced by studying automated reasoning, automatic problem solvers and planners, knowledge representation mechanisms, game playing, machine learning, and statistical pattern recognition. The class is a recommended for all scientists and engineers with a genuine curiosity about the fundamental obstacles to getting machines to perform tasks such as deduction, learning, and planning and navigation. Strong programming skills and a good grasp of the English language are expected; students will be asked to complete both programming assignments and writing assignments. The course will include a brief introduction to scientific writing and experimental design, including assignments to apply these concepts. [Applications]	3.00	20	WF 12:00-1:15PM
EN.600.344	01	E		**Computer Network Fundamentals** *Haberman, Brian*	3.00	30	TTh 9:00-10:15AM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 600.333 or 600.433 or permission. Students can only receive credit for 600.344 or 600.444, not both. This course considers intersystem communications issues. Topics covered include layered network architectures; the OSI model; bandwidth, data rates, modems, multiplexing, error detection/correction; switching; queuing models, circuit switching, packet switching; performance analysis of protocols, local area networks; and congestion control. [Systems]			
EN.600.363	01	EQ		**Introduction To Algorithms** *Braverman, Vladimir* Prereq: 600.226 or Perm. Req'd. Students may receive credit for 600.363 or 600.463, but not both. This course concentrates on the design of algorithms and the rigorous analysis of their efficiency. Topics include the basic definitions of algorithmic complexity (worst case, average case); basic tools such as dynamic programming, sorting, searching, and selection; advanced data structures and their applications (such as union-find); graph algorithms and searching techniques such as minimum spanning trees, depth-first search, shortest paths, design of online algorithms and competitive analysis.	3.00	40	TTh 1:30-2:45PM; F 1:30-2:20PM
EN.600.392	01	E		**CS Design Project** *Froehlich, Peter* Prereq: 600.120 and 600.226; recommended: 600.321 This course will give junior and senior CS majors an intensive design project experience. Students will work in groups with real world customers to develop a working system. Project design, management and communication skills will be emphasized. Software development methodologies may also be presented. [General]	3.00	30	TBA
EN.600.402	01	E		**Medical Informatics** *Ochs, Michael* Advances in technology are driving a change in medicine. "Personalized Medicine" promises treatments tuned to the genetics of each individual. Computers and information technology will be critical to this transition. We shall discuss some of the coming changes in terms of computer technology, including genomic data management, computer-based patient records, and clinical practice guidelines, focusing on cancer as a paradigm. We will discuss the underlying technologies driving these developments - databases and warehouses, controlled vocabularies, and decision analysis. Short course meets 4 weeks 4/8-5/1.	1.00	30	MW 4:30-5:45PM
EN.600.416	01	E		**Database Systems** *Ahmad, Yanif N*	3.00	30	MW 12:00-1:30PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Similar material as 600.316, covered in more depth. Intended for upper-level undergraduates and graduate students. [Systems] Prereq: 600.120 and 600.226. Students may receive credit for 600.316 or 600.416, but not both.			
EN.600.420	01	E		**Parallel Programming** *Burns, Randal* Prereq: 600.120 or equiv. Graduate level version of 600.320. Students may receive credit for 600.320 or 600.420, but not both. [Systems]	3.00	40	MW 4:30-5:45PM
EN.600.424	01	E		**Network Security** *Mishra, Amitabh* This course focuses on communication security in computer systems and networks. The course is intended to provide students with an introduction to the field of network security. The course covers network security services such as authentication and access control, integrity and confidentiality of data, firewalls and related technologies, Web security and privacy. Course work involves implementing various security techniques. A course project is required. Prerequisites: 600.226, 600.344/444 or permission; 600.120 (or equivalent) recommended. [Systems]	3.00	20	F 3:00-5:30PM
EN.600.425	01	E		**Declarative Methods** *Eisner, Jason* Prereq: 600.226, 600.271, Calc II. Students can only receive credit for 600.325 or 600.425, not both. Graduate level version of 600.325. [Analysis]	3.00	20	MWF 3:00-4:15PM
EN.600.426	01	EQ		**Principles of Programming Languages** *Smith, Scott F* No Freshmen or Sophomores Prereq: 600.226 Functional, object-oriented, and other language features are studied independent of a particular programming language. Students become familiar with these features by implementing them. Most of the implementations are in the form of small language interpreters. Some type checkers and a small compiler will also be written. The total amount of code written will not be overly large, as the emphasis is on concepts. The ML programming language is the implementation language used. [Analysis]	3.00	40	MW 1:30-2:45PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.600.428	01	E		**Compilers and Interpreters** *Froehlich, Peter* Graduate version of 600.328. Students may receive credit for 600.328 or 600.428, but not both. Prereqs: C/C++ programming and data structures Introduction to compiler design, including lexical analysis, parsing, syntax-directed translation, symbol tables, run-time environments, and code generation and optimization. Students are required to write a compiler as a course project. [Systems] Co-listed with 600.328	3.00	30	MWF 10:00-10:50AM
EN.600.435	01	E		**Artificial Intelligence** *Mitchell, Benjamin Rees* Prereq: 600.226, 550.171; Recommended: linear algebra, prob/stat. Students may receive credit for 600.335 or 600.435, not both. Graduate level version of 600.335 [Applications].	3.00	30	WF 12:00-1:15PM
EN.600.436	01	E		**Algorithms for Sensor-Based Robotics** *Hager, Gregory* [Formerly 600.336.] This course surveys the development of robotic systems for navigating in an environment from an algorithmic perspective. It will cover basic kinematics, configuration space concepts, motion planning, and localization and mapping. It will describe these concepts in the context of the ROS software system, and will present examples relevant to mobile platforms, manipulation, robotics surgery, and human-machine systems. [Analysis] Prereq: 600.226, Linear Algebra and Probability. Students may receive credit for only one of 600.336, 600.436 and 600.636.	3.00	30	TTh 12:00-1:15PM
EN.600.439	01	E		**Computational Genomics** *Langmead, Benjamin* Your genome is the blueprint for the molecules in your body. It's also a string of letters (A, C, G and T) about 3 billion letters long. How does this string give rise to you? Your heart, your brain, your health? This, broadly speaking, is what genomics research is about. This course will familiarize you with a breadth of topics from the field of computational genomics. The emphasis is on current research problems, real-world genomics data, and efficient software implementations for analyzing data. Topics will include: string matching, sequence alignment and indexing, assembly, and sequence models. Course will involve significant programming projects. [Applications] Prereq: 600.120 & 600.226.	3.00	5	MW 3:00-4:15PM
EN.600.444	01	E		**Computer Networks** *Haberman, Brian*	3.00	30	TTh 9:00-10:15AM

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 600.333 or 600.433 or permission. Students can only receive credit for 600.344 or 600.444, not both. This course considers intersystem communications issues. Topics covered include layered network architectures; the OSI model; bandwidth, data rates, modems, multiplexing, error detection/correction; switching; queuing models, circuit switching, packet switching; performance analysis of protocols, local area networks; and congestion control.			
EN.600.446	01	E		**Computer Integrated Surgery II** *Taylor, Russell H* Prereq: 600.445 or perm req'd. Students may receive credit for 600.446 or 600.646, but not both. This weekly lecture/seminar course addresses similar material to 600.445, but covers selected topics in greater depth. In addition to material covered in lectures/seminars by the instructor and other faculty, students are expected to read and provide critical analysis/presentations of selected papers in recitation sessions. Students taking this course are required to undertake and report on a significant term project under the supervision of the instructor and clinical end users. Typically, this project is an extension of the term project from 600.445, although it does not have to be. Grades are based both on the project and on classroom recitations. Students wishing to attend the weekly lectures as a 1 -credit seminar should sign up for 600.452. Students may also take this course as 600.646. The only difference between 600.446 and 600.646 is the level of project undertaken. Typically, 600.646 projects require a greater degree of mathematical, image processing, or modeling background. Prospective students should consult with the instructor as to which course number is appropriate. [Applications]	3.00	35	TTh 1:30-2:45PM
EN.600.452	01	E		**Sem:Comp Integ Surg II** *Taylor, Russell H* Prereq: 600.445 or perm req'd. Students may receive credit for 600.446 or 600.452, but not both. Lecture only version of 600.446 (no project).	1.00	5	TTh 1:30-2:45PM
EN.600.463	01	EQ		**Algorithms I** *Braverman, Vladimir*	3.00	30	TTh 1:30-2:45PM; F 1:30-2:20PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 600.226 or Perm. Req'd. Students may receive credit for 600.363 or 600.463, but not both. This course concentrates on the design of algorithms and the rigorous analysis of their efficiency. topics include the basic definitions of algorithmic complexity (worst case, average case); basic tools such as dynamic programming, sorting, searching, and selection; advanced data structures and their applications (such as union-find); graph algorithms and searching techniques such as minimum spanning trees, depth-first search, shortest paths, design of online algorithms and competitive analysis.			
EN.600.466	01	E		**Information Retrieval and Web Agents** *Yarowsky, David* Prereq:600.226 An in-depth, hands-on study of current information retrieval techniques and their application to developing intelligent WWW agents. Topics include a comprehensive study of current document retrieval models, mail/news routing and filtering, document clustering, automatic indexing, query expansion, relevance feedback, user modeling, information visualization and usage pattern analysis. In addition, the course explores the range of additional language processing steps useful for template filling and information extraction from retrieved documents, focusing on recent, primarily statistical methods. The course concludes with a study of current issues in information retrieval and data mining on the World Wide Web. Topics include web robots, spiders, agents and search engines, exploring both their practical implementation and the economic and legal issues surrounding their use. [Applications	3.00	60	TTh 3:00-4:15PM
EN.600.476	01	EQ		**Machine Learning in Complex Domains** *Saria, Suchi*	3.00	5	MW 1:30-2:45PM

Computer Science

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				How can robots locate themselves in an indoor environment when navigating? How do you infer which patients need attention first in the ICU? How can one identify the start of an epidemic using tweets? How does one predict the way a traffic jam will spread through the local streets during an Orioles game? How can you communicate with your TV using only hand gestures? This class will cover the fundamental concepts of Probabilistic Graphical Models as a framework for addressing questions like the ones above. We will study algorithms for model estimation, exact and approximate inference. The class will have 4 interactive sessions during which students will learn through an open discussion format how to think about open-ended real-world problems with the tools learnt in class. Students are also required to tackle a project of their choice within which they will experiment with the ideas learnt in class. Pre-reqs: Students in the class will be asked to do assignments in Matlab. Matlab is typically easy to pick up if one is already familiar with a different programming language. - Students are expected to be mathematically mature. One should have taken at least an introductory course in probability theory and linear algebra. Though not required, exposure to optimization or machine learning is recommended. Proficiency in at least one programming language is expected. When in doubt, send the instructor a copy of your transcript to see if the class is appropriate for you. Also, sit through the first few sessions and first homework to get a sense of fit. Prereqs: EN.550.310 OR EN.550.311 OR EN.550.420 OR EN.550.430 AND EN.550.291 OR AS.110.201.			
EN.600.488	01	EN		**Foundations of Computational BIology & Bioinformatics II** *Karchin, Rachel* Prerequisites: math through linear algebra and differential equations, at least one prob/stat course, 580.221 or equiv., 600.226 or equiv. This course will introduce probabilistic modeling and information theory applied to biological sequence analysis, focusing on statistical models of protein families, alignment algorithms, and models of evolution. Topics will include probability theory, score matrices, hidden Markov models, maximum likelihood, expectation maximization and dynamic programming algorithms. Homework assignments will require programming in Python. Foundations of Computational Biology I is not a prereq. [Analysis] Co-listed with 580.488.	3.00	5	MW 4:30-5:45PM

Electrical & Computer Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.510.314	01	EN		**Electron Prop-Material** *Poehler, Theodore O* Prereqs: 510.311 and 510.202 or another programming course, or permission of instructor. Fourth of the Introduction to Materials Science series, this course is devoted to a study of the electronic, optical and magnetic properties of materials. Lecture topics include electrical and thermal conductivity, thermoelectricity, transport phenomena, dielectric effects, piezoelectricity, and magnetic phenomena.	3.00	40	MWF 9:00-9:50AM
EN.520.142	01	EQ		**Digital Systems Fundamentals** *Meyer, Gerard G* Number systems and computer codes, switching functions, minimization of switching functions, Quine - McCluskey method, sequential logic, state tables, memory devices, analysis, and synthesis of synchronous sequential devices.	3.00	93	MWF 11:00-11:50AM
EN.520.212	02	E		**ECE Engineering Team Project (Freshmen and Sophomores)** *Kang, Jin U* Permission of instructor required. This course introduces the student to the basics of engineering team projects. The student will participate in an ECE engineering team project as a member. The student is expected to participate in the different aspects of the project over several semesters. (Freshmen and Sophomores)	1.00	100	TBA
EN.520.212	03	E		**ECE Engineering Team Project (Freshmen and Sophomores)**	1.00	100	TBA
EN.520.214	01	EQ		**Signals & Systems I** *Elhilali, Mounya* Prerequisite: Circuits 520.213, Co-requisite: Calculus III 110.202. An introduction to discrete-time and continuous-time signals and systems covers representation of signals and linear time-invariant systems and Fourier analysis.	4.00	28	TTh 10:30-11:45AM; W 4:30-5:30PM
EN.520.214	02	EQ		**Signals & Systems I**	4.00	28	TTh 10:30-11:45AM; M 3:30-4:30PM
EN.520.220	01	EN		**Fields, Matter & Waves** *Davidson, Frederic* Prerequisites: 520.219 Fields, Matter and Waves or equivalent. Magnetostatic fields in vacuum and material media. Maxwell's equations and time-dependent electric and magnetic fields, electromagnetic waves and radiation, transmission lines, wave guides, applications.	3.00	50	MW 3:00-4:15PM
EN.520.222	01	E		**Computer Architecture** *Jenkins, Robert E*	3.00	25	TTh 1:30-2:45PM

Electrical & Computer Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 520.142 A study of the structure and organization of classical von Neuman uniprocessor computers. Topics include a brief history of modern machines starting from the Turing computer model, instruction sets, addressing, RISC versus CICS, traps and interrupt handling, twos complement arithmetic, adders and ALUs, CSA's Booth's algorithm, multiplication and division, control unit design, microprogramming, dynamic versus static linking, memory systems and memory hierarchy, paging segmentation, cache hardware, cache organizations, and replacement policies.			
EN.520.353	01	EQ		**Control Systems** *Tarraf, Danielle* Prereq: 520.214 & 110.201 or 550.291 Modeling, analysis, and an introduction to design for feedback control systems. Topics include state equation and transfer function representations, stability, performance measures, root locus methods, and frequency response methods (Nyquist, Bode).	3.00	30	TTh 10:30-11:45AM
EN.520.415	01	E		**Image Process & Analysis II** *Goutsias, John I* Prerequisite: 520.414 This course covers fundamental methods for the processing and analysis of images and describes standard and modern techniques for the understanding of images by morphological image processing and analysis, image representation and description, image recognition and interpretation.	3.00	50	MW 4:30-5:45PM
EN.520.424	01	EQ		**FPGA Synthesis Lab** *Jenkins, Robert E* Prereq: 520.142, 520.345, 600.333 or 520.349 or 520.372 Advanced competence in computer systems. An advanced laboratory course in the application of FPGA technology to information processing, using VHDL synthesis methods for hardware development. The student will use commercial CAD software for VHDL simulation and synthesis, and implement their systems in programmable XILINX 20,000 gate FPGA devices. The lab will consist of a series of digital projects demonstrating VHDL design and synthesis methodology, building up to final projects at least the size of an 8-bit RISC computer. Projects will encompass such things as system clocking, flip-flop registers, state-machine control, and arithmetic. The students will learn VHDL methods as they proceed through the lab projects, and prior experience with VHDL is not a pre-requisite.	3.00	13	T 3:30-5:00PM; Th 4:00-6:00PM
EN.520.433	01	E		**Medical Image Analysis** *Prince, Jerry Ladd*	3.00	40	MW 3:00-4:15PM

Electrical & Computer Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites: 520.432 or 580.472 (Medical Imaging Systems) or 550.310 or 550.311. Probability and Statistics). This course covers the principles and algorithms used in the processing and analysis of medical images. Topics include, interpolation, registration, enhancement, feature extraction, classification, segmentation, quantification, shape analysis, motion estimation, and visualization. Analysis of both anatomical and functional images will be studied and images from the most common medical imaging modalities will be used. Projects and assignments will provide students experience working with actual medical imaging data.			
EN.520.434	01			**Modern Biomedical Imaging Instrumentation and Techniques** *Tsui, Benjamin* Prereq: 520.432 or 580.472 An intermediate biomedical imaging course covering modern biomedical imaging instrumentation and techniques as applied to diagnostic radiology and other biomedical applications. It includes recent advances in various biomedical imaging modalities, multi-modality imaging and molecular imaging. The course is team taught by experts in the respective fields and provides a broad based knowledge of modern biomedical imaging to prepare students for graduate studies and research in biomedical imaging. Also, the course will offer tours and practical experience with modern biomedical imaging equipments in clinical and research settings.	3.00	22	TTh 9:00-10:15AM
EN.520.448	01			**Electronics Design Lab** *Etienne Cummings, Ralph* Prerequisites: 520.216, 520.345 or equivalent. Recommended: 600.333, 600.334, 520.349, 520.372, 520.490 or 520.491. An advanced laboratory course in which teams of students design, build, test and document application specific information processing microsystems. Semester long projects range from sensors/actuators, mixed signal electronics, embedded microcomputers, algorithms and robotics systems design. Demonstration and documentation of projects are important aspects of the evaluation process.	3.00	30	W 11:00-11:50AM; F 1:30-4:20PM
EN.520.448	02			**Electronics Design Lab**	3.00	30	W 1:00-1:50PM; F 1:00-3:50PM
EN.520.450	01			**Adv Micro-Processor Lab** *Glaser, Robert E* Prereq: 520.349 This course covers the usage of common microcontroller peripherals. Interrupt handling, timer operations, serial communication, digital to analog and analog to digital conversions, and flash ROM programming are done on the 68HC08, 8051, and eZ8 microcontrollers. Upon completion, students can use these flash-based chips as elements in other project courses.	3.00	20	Th 10:30AM-1:20PM; Th 8:00-8:50AM
EN.520.450	02			**Adv Micro-Processor Lab**	3.00	20	Th 1:30-4:20PM; Th 8:00-8:50AM
EN.520.453	02	E		**Advanced ECE Engineering Team Project** *Kang, Jin U*	3.00	100	TBA

Electrical & Computer Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				(Juniors and Seniors) Permission of instructor is required. The course introduces the student to running an engineering team project. The student will participate in the ECE engineering team project as a leading member. The student is expected to participate in the different aspects of the project over several semesters and manage both team members and the project.			
EN.520.453	03	E		**Advanced ECE Engineering Team Project**	3.00	100	TBA
EN.520.482	01	EN		**Intro to Lasers** *Khurgin, Jacob* Prerequisites: 520.219, 520.220 This course covers the basic principles of laser oscillation. Specific topics include propagation of rays and Gaussian beams in lens-like media, optical resonators, spontaneous and stimulated emission, interaction of optical radiation and atomic systems, conditions for laser oscillation, homogeneous and inhomogeneous broadening, gas lasers, solid state lasers, Q-switching and mode locking of lasers.	3.00	20	MW 12:00-1:15PM
EN.520.483	01			**Bio-Photonics Laboratory** *Kang, Jin U* This laboratory course involves designing a set of basic optical experiments to characterize and understand the optical properties of biological materials. The course is designed to introduce students to the basic optical techniques used in medicine, biology, chemistry and material sciences.	3.00	30	W 1:30-4:50PM
EN.520.492	01	E		**Mixed-Mode VLSI Systems** *Pouliquen, Philippe O* Prerequisites: 521.491 CAD of Digital VLSI Systems or Equivalent. Silicon models of information and signal processing functions, with implementation in mixed analog and digital CMOS integrated circuits. Aspects of structured design, scalability, parallelism, low power consumption, and robustness to process variations. Topics include digital-to-analog and analog-to-digital conversion, delta-sigma modulation, bioinstrumentation, and adaptive neural computation. The course includes a VLSI design project.	3.00	20	MWF 10:00-10:50AM
EN.520.499	01	E		**Senior Design Project** *Foster, Amy C* Capstone design project, in which a team of students engineer a system and evaluate its performance in meeting design criteria and specifications. Example application areas are microelectronic information processing, image processing, speech recognition, control, communications and biomedical instrumentation. The design needs to demonstrate creative thinking and experimental skills, and needs to draw upon knowledge in basic sciences, mathematics and engineering sciences. Interdisciplinary participation, such as by biomedical engineering, mechanical engineering and computer science majors, is strongly encouraged.	3.00		TBA

Electrical & Computer Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.520.499	02	E		**Senior Design Project** *Elhilali, Mounya*	3.00		TBA
EN.520.499	03	E		**Senior Design Project** *Prince, Jerry Ladd*	3.00		TBA
EN.520.499	04	E		**Senior Design Project** *Andreou, Andreas*	3.00		TBA
EN.520.499	05	E		**Senior Design Project** *Etienne Cummings, Ralph*	3.00		TBA
EN.520.499	06	E		**Senior Design Project** *Tran, Trac Duy*	3.00		TBA
EN.520.499	07	E		**Senior Design Project** *Tarraf, Danielle*	3.00		TBA
EN.520.499	08	E		**Senior Design Project** *West, James E*	3.00		TBA

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.660.103	01			**The Promise and Peril of Microfinance** *Rice, Eric* Microcredit, microlending and microfinance are relatively new tools, potentially useful to help alleviate poverty, contribute to local economies, earn a living and make profit. The promise and publicity has generated practices, experiments and businesses worldwide; microcredit even generated a Nobel Prize for Muhammad Yunus and the Grameen Bank in 2006. So too, the spread of the concept has produced excesses and controversy and more recently, scholarship in the practices and ideas. In this course we will explore the theory, practice and possibilities of the ideas with emphasis on both the developing world and western economies. The course uses lecture, discussion, case study and community investigation to explore the content. No audits. Class meets four times: 2/13/13, 2/20/13, 2/27/13, and 3/6/13.	1.00	20	W 3:00-5:45PM
EN.660.105	01	S	W	**Introduction to Business** *Aronhime, Lawrence* This course is designed as an introduction to the terms, concepts, and values of business and management. The course comprises three broad categories: the economic, financial, and corporate context of business activities; the organization and management of business enterprises; and, the marketing and production of goods and services. Topic specific readings, short case studies and financial exercises all focus on the bases for managerial decisions as well as the long and short-term implications of those decisions in a global environment. No audits.	4.00	25	MWF 12:00-12:50PM; T 1:30-2:20PM
EN.660.105	02	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; T 1:30-2:20PM
EN.660.105	03	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; T 3:00-3:50PM
EN.660.105	04	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; W 3:00-3:50PM
EN.660.105	05	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; Th 1:30-2:20PM
EN.660.105	06	S	W	**Introduction to Business**	4.00	25	MWF 12:00-12:50PM; Th 3:00-3:50PM
EN.660.105	07	S	W	**Introduction to Business** *Quesenberry, Keith*	4.00	25	TTh 12:00-1:15PM; M 1:30-2:20PM
EN.660.105	08	S	W	**Introduction to Business**	4.00	25	TTh 12:00-1:15PM; W 3:00-3:50PM
EN.660.203	01			**Financial Accounting** *Aronhime, Lawrence* The course in Financial Accounting is designed for anyone who could be called upon to analyze and/or communicate financial results and/or make effective financial decisions in a for-profit business setting. No prior accounting knowledge or skill is required for successful completion of this course. Because accounting is described as the language of business, this course emphasizes the vocabulary, methods, and processes by which all business transactions are communicated. The accounting cycle, basic business transactions, internal controls, and preparation and understanding of financial statements including balance sheets, statements of income and cash flows are covered. No audits.	3.00	35	MWF 10:00-10:50AM

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.660.203	02			**Financial Accounting** *Leps, Annette*	3.00	35	MW 12:00-1:15PM
EN.660.203	03			**Financial Accounting**	3.00	35	TTh 12:00-1:15PM
EN.660.203	04			**Financial Accounting** *Wright, Gail*	3.00	35	M 6:15-9:00PM
EN.660.250	01			**Principles of Marketing** *Kendrick, Leslie* This course explores the role of marketing in society and within the organization. It examines the process of developing, pricing, promoting and distributing products to consumer and business markets and shows how marketing managers use the elements of the marketing mix to gain a competitive advantage. Through interactive, application-oriented exercises, case videotapes, a guest speaker (local marketer), and a group project, students will have ample opportunity to observe key marketing concepts in action. The group project requires each team to research the marketing plan for an existing product of its choice. Teams will analyze what is currently being done by the organization, choose one of the strategic growth alternatives studied, and recommend why this alternative should be adopted. The recommendations will include how the current marketing plan will need to be modified in order to implement this strategy and will be presented to the instructor in written form and presented to the class. No audits.	3.00	40	MW 12:00-1:15PM
EN.660.250	02			**Principles of Marketing** *Crane, Donna L*	3.00	35	TTh 1:30-2:45PM
EN.660.250	03			**Principles of Marketing** *DeVries, Marci*	3.00	35	TTh 12:00-1:15PM
EN.660.250	04			**Principles of Marketing** *Pennington, Josianne W.*	3.00	35	W 3:30-6:00PM
EN.660.250	05			**Principles of Marketing** *Jones, Theresa Darlene*	3.00	35	T 6:15-9:00PM
EN.660.303	01			**Managerial Accounting** *Leps, Annette* This course introduces management accounting concepts and objectives including planning, control, and the analysis of sales, expenses, and profits. Major topics include cost behavior, cost allocation, product costing (including activity based costing), standard costing and variance analysis, relevant costs, operational and capital budgeting, and performance measurement. Prerequisite: 660.203 Financial Accounting. Note: not open to students who have taken 660.204 Managerial Accounting. No audits.	3.00	30	TTh 10:30-11:45AM
EN.660.308	01	S		**Business Law I** *Fisher, David*	3.00	35	M 6:15-9:00PM

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is designed to provide students an introduction to legal reasoning and analysis. Content distinguishes forms of business, civil versus criminal law, and agency principles; intellectual property concepts, contract Law, the UCC (Uniform Commercial Code) and consumer protection are explored and discussed in the context of assigned legal cases which are intended to develop a student's ability to analyze and apply law. Prerequisite OR corequisite: 660.105 Introduction to Business. Note: not open to students who have taken 660.205 Business Law I. No audits.			
EN.660.308	02	S		**Business Law I** *Rakes, W Bryan*	3.00	35	T 6:15-9:00PM
EN.660.310	01	H		**Case Studies in Business Ethics** *Franceschini, Mark* This course is designed as a workshop using case studies to introduce students to the ethical concepts that are relevant to resolve moral issues in contemporary business and social settings—both global and personal in nature. Students will learn the reasoning and analytical skills needed to apply ethical concepts to their own decision-making, to identify moral issues involved in the management of specific problem areas in business and society, and to understand the social and natural environments which give rise to moral issues. The course focus is on performance articulated by clear reasoning and effective verbal and written communication concerning ethical issues in business and society. Prerequisite: 660.105 Introduction to Business. Not open to students who have taken 660.231 Case Studies in Business Ethics. No audits.	3.00	30	M 6:15-9:00PM
EN.660.311	01	S		**Law and the Internet** *Sandhaus, Douglas* Sometimes called “Cyber law,” this course uses the case study method to examine some of the most significant and compelling legal aspects, issues, and concerns involved with operating a business enterprise in an Internet environment. Some of the issues likely to be covered include jurisdiction, resolution of online disputes, trademarks, copyright, licenses, privacy, defamation, obscenity, the application of traditional concepts of tort liability to an Internet context, computer crime, information security, taxation, international considerations, and an analysis of other recent litigation and/or statutes. Prerequisite: 660.205/660.308 Business Law I. Note: not open to students who have taken 660.306 Law and the Internet. No audits.	3.00	30	T 6:15-9:00PM
EN.660.321	01		W	**Managing & Marketing Social Enterprises** *Rice, Eric*	3.00	20	T 3:00-5:45PM

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course focuses on preparing students to engage in and lead social enterprises as we explore the options for creating social value. Using a combination of lecture, case study and project work, we investigate both for-profit and non-profit models for creating social value with special emphasis on the non-profit community. Particular emphasis is placed on the management challenges of social enterprises such as creating and conveying their message, options for dealing with finances, relationships within communities, and methods for building constituencies. Additionally, we address critical issues such as measures of success, scale, replication and failure. The class requires contact with organizations in the community as well as one long weekend away from campus. Prerequisite: 660.105 Introduction to Business or 660.333 Leading Change or 660.220/660.340 Principles of Management. No audits.			
EN.660.331	01			**Leadership in Teams** *Crane, Donna L* Prerequisite: 660.332. This course will allow students to develop the analytical skills needed to effectively lead and work in teams. Students will learn tools and techniques for problem solving, decision-making, conflict resolution, task management, communications, and goal alignment in team settings. They will also learn how to measure team dynamics and performance, and assess methods for building and sustaining high-performance teams. Students will also explore their own leadership, personality and cognitive styles and learn how these may affect their performance in a team. The course will focus on team-based experiential projects and exercises as well as provide opportunities to individually reflect and write about the concepts explored and skills gained throughout the course. No Audits.	3.00	30	TTh 10:30-11:45AM
EN.660.332	01	S	W	**Leadership Theory** *Smedick, William D* Students will be introduced to the history of Leadership Theory from the “Great Man” theory of born leaders to Transformational Leadership theory of non-positional learned leadership. Transformational Leadership theory postulates that leadership can be learned and enhanced. The course will explore the knowledge base and skills necessary to be an effective leader in a variety of settings. Students will assess their personal leadership qualities and develop a plan to enhance their leadership potential. Recommended prerequisite: 660.105 Introduction to Business or 660.220 or 660.340 Principles of Management. No audits.	3.00	30	MWF 12:00-12:50PM
EN.660.336	01	S	W	**Community Engineering: Interdisciplinary Problem Solving** *Rice, Eric*	3.00	32	TTh 12:00-1:15PM

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				So many big and seemingly intractable problems inhibit progress and diminish quality of life especially in and around urban communities. Surely there are ways to begin to tackle some of these problems, if we approach them from a multi-disciplinary perspective. This course provides that opportunity as students, who work primarily in teams, apply theory and ingenuity to investigate problems, propose solutions or invent devices that address some of these problems. Class time is spent in lecture, discussion, and applied community projects to master content. Time will be spent participating on teams and working in community organizations in addition to class.			
EN.660.340	01			**Principles of Management** *Izenberg, Illysa B* This course introduces the student to the management process. The course takes an integrated approach to management by examining the role of the manager from a traditional and contemporary perspective while applying decision-making and critical-thinking skills to the challenges facing managers in today's globally diverse environment. The course examines the techniques for controlling, planning, organizing resources and leading the workforce. Not open to students who have taken 660.220 Principles of Management. Prerequisite: 660.105 Introduction to Business. No audits.	3.00	35	W 1:30-4:15PM
EN.660.341	01		W	**Business Process and Quality Management** *Reiter, Joshua* This course focuses on both quantitative and qualitative analytical skills and models essential to operations process design, management, and improvement in both service and manufacturing oriented companies. The objective of the course is to prepare the student to play a significant role in the management of a world-class company which serves satisfied customers through empowered employees, leading to increased revenues and decreased costs. The material combines managerial issues with both technical and quantitative aspects. Practical applications to business organizations are emphasized. Prerequisites: 660.105 Introduction to Business or 660.241 IT Management. No audits.	3.00		Th 1:30-4:15PM
EN.660.352	01			**New Product Development** *Agronin, Michael*	3.00	30	M 6:15-9:00PM

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				New product development is the ultimate interdisciplinary entrepreneurial art, combining marketing, technical, and managerial skills. A successful product lies at the intersection of the user's need, a technical solution, and compelling execution. This class will bootstrap your experience in the art through exercises and team projects. We will examine products and services, consumer and industrial, simple and technologically complex. Case studies will feature primary sources and the instructor's personal experiences as an inventor for a major consumer products company. Topics will span the product development cycle: identifying user needs, cool-hunting, brainstorming, industrial design, prototyping techniques, market research to validate new ideas, and project management -- especially for managing virtual teams and foreign manufacturers. Prerequisite: 660.250 Principles of Marketing. No audits.			
EN.660.354	01			**Consumer Behavior** *Crane, Donna L* This course will explore how and why consumers make choices in the marketplace—the "buy-ology" of their behavior. We will learn the psychological, social, anthropological, and economic underpinnings of consumer behavior as well as the brain chemistry that affects choices in the marketplace. Students will learn how consumer behavior can and is influenced and the sometimes-unintended consequences of marketing campaigns designed to produce a particular behavior. Students will analyze how consumers solve problems, assess tradeoffs and make choices; how they integrate and react to retail surroundings, smells, product displays, brand, pricing strategies, social pressures, market structures and a myriad of other influences and motivations to buy. Students will also explore how marketers incorporate what is known about consumer behavior into advertising and promotional campaigns, market segmentation and positioning, pricing strategies and new product introductions. Student experiential projects will include ethnographic observations and analyses of real-world consumer behavior. Prerequisite: 660.250 Principles of Marketing. No audits.	3.00	30	TTh 12:00-1:15PM
EN.660.404	01	S		**Business Law II** *Fisher, David* Building on the material from Business Law I, topics examined include entrepreneurship, business entities and business formation, principles of agency, real property, personal property, bailments, bankruptcy, secured transactions, employment discrimination, business financing, investor protection, antitrust and environmental law. Prerequisite: 660.308 or 660.205 Business Law I. Not open to students who have taken 660.206 or 660.307 Business Law II. No audits	3.00	35	T 6:15-9:00PM
EN.660.420	01		W	**Marketing Strategy**	3.00	25	TTh 10:30-11:45AM

Entrepreneurship and Management

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Kendrick, Leslie This writing intensive course helps students develop skills in formulating, implementing, and controlling a strategic marketing program for a given product-market entry. Using a structured approach to case analysis, students will learn how to make the kinds of strategic marketing decisions that will have a long-term impact on the organization and support these decisions with quantitative analyses. Through textbook readings, students will learn how to identify appropriate marketing strategies for new, growth, mature, and declining markets and apply these strategies as they analyze a series of marketing cases. The supplementary readings, from a broad spectrum of periodicals, are more applied and will allow students to see how firms are addressing contemporary marketing challenges. In addition to analyzing cases individually, each student will be part of a team that studies a case during the latter half of the semester, developing marketing strategy recommendations, including financial projections, and presenting them to the class. Prerequisite: 660.250 Principles of Marketing. No audits.			
EN.660.450	01			**Advertising & Integrated Marketing Communication** *Kendrick, Leslie* (formerly Advertising and Promotion) This course builds on the promotional mix concepts covered in Principles of Marketing (660.250)—advertising, public relations, sales promotion and personal selling. Students will learn how marketers are changing the ways they communicate with consumers and the ways in which promotional budgets are allocated—and how this impacts the development of marketing strategies and tactics. Working with a client (provided by EdVenture Partners) that has chosen this JHU class as its “advertising agency” and an actual budget provided by the firm, the class will form small teams to mirror the functional organization of an actual ad agency (market research, media strategy/planning, copywriting/design, public relations, etc.). Student teams will then develop a promotional plan and corresponding budget to reach the desired target market (JHU undergrads who meet the client’s criteria), implement the plan and then evaluate its effectiveness through pre- and post campaign market research conducted on the target consumer. Prerequisite: 660.250 Principles of Marketing. Note: Not open to students who have taken 660.450 as Advertising and Promotion. No audits.	3.00	40	TTh 12:00-1:15PM

General Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.500.401	01			**Research Laboratory Safety** *Kuespert, Daniel* An introduction to laboratory safety including chemical, biological, radiation, and physical hazards. Includes information on hazard assessment techniques, laboratory emergencies, and general lab standards for Whiting School of Engineering. The class will feature hands-on exercises with real-life experiments. Intended for students who have not yet begun working in a research laboratory.	1.00	50	M 12:00-1:15PM
EN.500.401	02			**Research Laboratory Safety**	1.00	50	M 1:30-2:45PM
EN.560.141	01	EN	W	**Perspectives on the Evolution of Structures** *Schafer, Benjamin* Why do buildings and bridges look the way they do today? Students will be provided the tools to answer this question for themselves through a study of the history of the design of buildings and bridges throughout the world from both engineering and architectural/aesthetic perspectives. Only simple mathematics is required (no calculus). Students will participate in individual and group critique of structures from engineering, architectural, and social points of view.	3.00	100	TTh 3:00-4:15PM

Geography & Environmental Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.570.110	01	HS		**Introduction to Engineering for Sustainable Development** *Schoenberger, Erica* For engineering students who want to work on problems of poverty, and social and environmental dislocation, this course introduces major debates about development and explores cases of engineering interventions in developing countries to identify factors that shape success in achieving project goals and avoiding undesirable outcomes.	3.00	50	TTh 1:30-2:45PM
EN.570.210	01	EQ		**Computation/Math Modeling** *Wilcock, Peter Richard* Freshmen and Sophmore Only Prereq: 110.108 or equivalent An introduction to the use of computers in developing mathematical models. A structured approach to problem definition, solution, and presentation using spreadsheets and mathematical software. Modeling topics include elementary data analysis and model fitting, numerical modeling, dimensional analysis, optimization, simulation, temporal and spatial models.	3.00	40	MW 1:30-2:45PM
EN.570.239	01	EN		**Emerging Environ Issues** *Roberts, A Lynn* Prereq: Second semester Chemistry Scientific principles underpinning environmental issues, with an emphasis on potential impacts of anthropogenic perturbation on human and ecosystem health.	3.00	30	TTh 9:00-10:15AM
EN.570.302	01	EN		**Water & Wastewater Treatment** *Ball, William P* Prereq: 570.301 or Perm. Req'd. Theory and design of water and wastewater treatment processes including coagulation, sedimentation, filtration, adsorption, gas transfer, aerobic and anaerobic biological treatment processes, disinfection, and hydraulic profiles through treatment units.	3.00	40	MWF 9:00-9:50AM
EN.570.304	01	EN		**Environmental Eng Lab** *Roberts, A Lynn* Introduction to laboratory measurements relevant to water supply and wastewater discharge, including pH and alkalinity, inorganic and organic contaminants in water, reactor analysis, bench testing for water treatment, and measurement and control of disinfection by-products. Prerequisite EN.570.210 or Instructor Permission and co-requisite: EN.570.302.	3.00	12	Th 1:30-5:15PM; TTh 12:00-1:15PM
EN.570.304	02	EN		**Environmental Eng Lab**	3.00	12	TTh 12:00-1:15PM; F 1:30-5:15PM
EN.570.322	01			**Projects in Appropriate and Sustainable Technology** *Ball, William P*	1.00	7	W 2:30-3:50PM

Geography & Environmental Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.570.328	01	N		**Geography & Ecology of Plants** *Brush, Grace S* Patterns of aquatic and terrestrial plant species; historical changes in patterns using paleobotanical techniques; emphasis on biological and physical mechanisms controlling the patterns; the role of climate and man on plant distributions; several field trips; project required.	3.00	30	TTh 10:30-11:45AM
EN.570.375	01			**Groundwater** *Hilpert, Markus* This introductory course emphasizes the fundamental principles governing the movement of water and contaminants in groundwater systems. Topics include groundwater hydraulics, well hydraulics, groundwater recharge, and solute transport. Prerequisites: Differential Equations (e.g. 550.291 or 110.302) Corequisites: Fluid Mechanics (570.351) Required Text: R.J. Charbeneau. Groundwater Hydraulics and Pollutant Transport. Waveland Press, Inc.	3.00	35	MW 12:00-1:15PM
EN.570.401	01	N	W	**Ecosystems Ecology** *Brush, Grace S* This course compares the geography, biological structure, economics, history and dynamics of a number of terrestrial and marine ecosystems. The effect of human and natural disturbance, including climate on the evolution of the ecosystem s will be considered. Designs for restoration and maintenance of ecosystems within the context of climate change and societal organizations will be studied. Sources will include historical and paleoecological records as well as results from the National Science Foundaion Long Term Ecological Studies of Ecosystems (the LTER program).	3.00	25	W 2:00-5:00PM
EN.570.407	01	S		**Comparison of Environmental Challenges and Governance in China and the US** *Bouwer, Edward J*	3.00	30	Th 7:00-9:30PM

Geography & Environmental Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				In cooperation with the School of the Environment at Nanjing University, Nanjing, China, this course will study China's environmental challenges and governance in the context of America's own environmental challenges and governance system. Case studies will involve greenhouse gas emissions and a comparison of water quality issues in Tai Lake and the Chesapeake Bay. We will consider how developments may shape business, government, and culture, and the ways in which China and America may learn from one another. The class sessions will be conducted in part "live," in part by teleconference with Nanjing University, and in part by web (including communications with Nanjing University students and faculty). The objectives for the course are to 1) Provide students with basic information and concepts-of law, business, and governance needed to understand 21st century environmental governance challenges; 2) Provide students exposure to important environmental problems facing both China and America; 3) Provide students with alternative frameworks needed to sift through and understand the wealth of information about environmental challenges and opportunities faced by China in the globalized world; and 4) Encourage students to learn to observe and think independently about how to frame and address questions of China environmental challenges and governance which may be key to the 21st century.			
EN.570.418	01	E		**Multiobjective Programming and Planning** *Williams, Justin* Public sector problems are typically characterized by a multiplicity of objectives and decision makers. This course presents a relatively new area of systems analysis which is useful for such problems: multiobjective programming or vector optimization theory. The fundamental concepts are developed and various methods are presented, including multiattribute value and utility theory. Undergraduate level of 570.618. Prereq: 570.495 or Perm req'd.	3.00		MW 3:00-4:15PM
EN.570.421	01	E		**Env Eng Design II** *Wilcock, Peter Richard* Prereq: 570.302, 570.352, and 570.419 Engineering design process from problem definition to final design. Team projects include written/oral presentations. Students will form small teams that work with local companies or government agencies in executing the project.	3.00	20	T 4:30-7:00PM
EN.570.423	01	N		**Princip of Geomorphology** *Wilcock, Peter Richard* Analysis of the factors responsible for the form of the landscape. The concept of the cycle of erosion is discussed primarily in terms of the principles that govern the processes of erosion. Climate, conditions of soil formation, and the distribution of vegetation are considered as they relate to the development of landforms. Prereq: 270.220 The Dynamic Earth or perm. req'd	4.00	35	MWF 10:00-10:50AM; F 1:30-4:50PM

Geography & Environmental Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.570.428	01	S	W	**Problems in Applied Economics** *Hanke, Steve H* Permission Required. This course brings the principles of economic theory to bear upon particular problems in the fields of economics, finance and public policy. Micro, macro and international problems, from both the private and public sectors, are addressed. A heavy emphasis is placed on research and writing. Students learn how to properly conduct substantive economic research, utilizing statistical techniques and lessons from economic history. Findings are presented in the form of either memoranda or working papers. Exceptional work may be suitable for publication through the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise.	3.00	20	TBA
EN.570.441	01	N		**Environmental Inorganic Chemistry** *Stone, Alan T* Advanced undergraduate/graduate course that explores the chemical transformations of elements of the periodic table. Thermodynamic, kinetic, and mechanistic tools needed to address the multiple chemical species and interfaces that are present in natural waters and water-based technological processes are emphasized. Ligand exchange, metal ion exchange, adsorption/desorption, precipitation/dissolution, electron and group transfer reactions, and other concepts from coordination chemistry will be covered. Applications include elemental sources and sinks in ocean waters, reactive transport in porous media, weathering and soil genesis, nutrient and toxic element uptake by organisms, water treatment chemistry, and rational design of synthetic chemicals.	3.00	20	MWF 12:00-12:50PM
EN.570.446	01	EN		**Bio Process Water/Wastewater Trtmt** *Bouwer, Edward J* Prereq: 570.411 Fundamentals and application of aerobic and anaerobic biological unit processes for the treatment of municipal and industrial wastewater.	3.00	25	MWF 9:00-9:50AM
EN.570.448	01	E		**Phys/Chem Processes II** *Chen, Kai Loon* Prereq: 570.445 or Perm. Req'd Fundamentals and applications of physical and chemical processes used in water and wastewater treatment. This class will cover particle interactions, coagulation, flocculation, granular media filtration, membrane processes, and emerging water treatment processes.	3.00	30	TTh 9:00-10:15AM

Geography & Environmental Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.570.449	01	HS		**Social Theory for Engineers** *Schoenberger, Erica* Engineers work in a social context. This course addresses a number of questions about that social context. How should we understand how societies come about, how they evolve,and why the rules of the game are what they are? What is the relationship between the individual and society, what does it mean to be 'modern,' are there different forms of rationality? How might all this impinge on what it means to be an engineer?	3.00	20	W 1:30-4:30PM
EN.570.452	01	EN	W	**Exper Meth Env Eng Chem** *Stone, Alan T* Prereq. 570.443 An advanced laboratory course covering principles of modern analytical techniques and their applications to problems in environmental sciences. Topics include electrochemistry, spectrometry, gas and liquid chromatography. The course is directed to graduate students and advanced undergraduates in engineering and natural sciences.	4.00	22	M 1:30-5:20PM; F 1:30-2:45PM
EN.570.452	02	EN	W	**Exper Meth Env Eng Chem**	4.00	22	W 1:30-5:20PM; F 1:30-2:45PM
EN.570.460	01			**Environmental Colloidal Phenomena** *Chen, Kai Loon* This class will introduce fundamental concepts of colloidal and interfacial phenomena and apply them to natural and engineered aquatic systems. This course will also include topics related to the environmental applications and implications of nanotechnology. Modern measurement techniques employed in the laboratory to study colloidal behavior and interfacial interactions will be discussed. Lab demonstrations will be conducted and students will be given opportunities to review research papers related to topics covered in class. Topics include: Brownian motion and diffusion, size and surface characterization, electric double layer, electrokinetic phenomena, DLVO theory, Non-DLVO forces, aggregation, deposition, modern measurement techniques in the laboratory, fate and transport of engineered nanoparticles in the environment, and environmental applications of nanotechnology (e.g., sensors, remediation, antimicrobial agents).	3.00	45	MWF 11:00-11:50AM
EN.570.470	01	QS	W	**Applied Econ & Finance** *Hanke, Steve H*	3.00	20	F 1:30-4:30PM

Geography & Environmental Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisite EN.660.203 – Permission Required. This course focuses on company valuations, using the proprietary Hanke-Guttridge Discounted Free Cash Flow Model. Students use the model and data from financial statements filed with the Securities and Exchange Commission to calculate the value of publicaly-traded companies. Using Monte Carlo simulations, students also generate forecast scenarios, project likely share-price ranges and assess potential gains/losses. Stress is placed on using these simulations to diagnose the subjective market expectations contained in current objective market prices, and the robustness of these expectations. During the weekly seminar, students' company valuations are reviewed and critiqued.			
EN.570.487	01	S	W	**Financial Market Research** *Hanke, Steve H* Permission Required. This course investigates the workings of financial, foreign exchange, and commodity futures markets. Research is focused on price behavior, speculation, and hedging in these markets. Extensive research and writing is required. Exceptional work may be suitable for publication through the Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise.	3.00	20	TBA
EN.570.491	01	E		**Hazardous Waste Eng & Mgmt** *Alavi, Hedy V* This course addresses traditional and innovative technologies, concepts, and principles applied to the management of hazardous waste and site remediation to protect human health and the environment..	3.00	40	W 3:00-5:40PM
EN.570.492	01			**M. Gordon Wolman Seminar** *Chen, Kai Loon* Undergraduates only with permission of instructor	1.00	60	T 3:00-4:50PM; F 1:30-2:45PM
EN.570.496	01	EQ		**Urban and Environmental Systems** *Williams, Justin* The mathematical techniques learned in 570.305 and 570.495 are applied to realistic problems in urban and environmental planning and management. Examples of such problems include the siting of public-sector and emergency facilities; natural areas management, protection and restoration; solid waste collection, disposal, and recycling; public health; the planning and design of energy and transportation systems; and cost allocation in environmental infrastructure development.	3.00	30	TTh 10:30-11:45AM

Information Security Institute

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.600.444	01	E		**Computer Networks** *Haberman, Brian* Prereq: 600.333 or 600.433 or permission. Students can only receive credit for 600.344 or 600.444, not both. This course considers intersystem communications issues. Topics covered include layered network architectures; the OSI model; bandwidth, data rates, modems, multiplexing, error detection/correction; switching; queuing models, circuit switching, packet switching; performance analysis of protocols, local area networks; and congestion control.	3.00	30	TTh 9:00-10:15AM
EN.600.463	01	EQ		**Algorithms I** *Braverman, Vladimir* Prereq: 600.226 or Perm. Req'd. Students may receive credit for 600.363 or 600.463, but not both. This course concentrates on the design of algorithms and the rigorous analysis of their efficiency. topics include the basic definitions of algorithmic complexity (worst case, average case); basic tools such as dynamic programming, sorting, searching, and selection; advanced data structures and their applications (such as union-find); graph algorithms and searching techniques such as minimum spanning trees, depth-first search, shortest paths, design of online algorithms and competitive analysis.	3.00	30	TTh 1:30-2:45PM; F 1:30-2:20PM
EN.650.424	01	EQ		**Network Security** *Mishra, Amitabh* This course focuses on communication security in computer systems and networks. The course is intended to pro-vide students with an introduction to the field of network security. The course covers network security services such as authentication and access control, integrity and confidentiality of data, firewalls and related technologies, Web security and privacy. Course work involves implementing various security techniques. A course project is required. [Systems] Co-listed with 600.424	3.00	25	F 3:00-5:30PM
EN.650.458	01	E		**Introduction to Cryptography** *Li, Xiangyang* Permission of instructor only. Cryptography has a rich history as one of the foundations of information security. This course serves as the introduction to the working primitives, development and various techniques in this field. It emphasizes reasoning about the constraint and construction of cryptographic protocols that use shared secret key or public key. Students will also be exposed to some current open problems.	3.00	30	TTh 10:30-11:45AM
EN.650.471	01	EQ		**Cryptography & Coding** *Fishkind, Donniell*	4.00	15	MW 3:00-4:15PM; Th 10:30-11:20AM

Information Security Institute

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisites: Linear Algebra; 550.171 or permission of instructor. A first course in the mathematical theory of secure and reliable electronic communication. Cryptology is the study of secure communication: How can we ensure the privacy of messages? Coding theory studies how to make communication reliable: How can messages be sent over noisy lines? Topics include finite field arithmetic, error-detecting and error-correcting codes, data compressions, ciphers, one-time pads, the Enigma machine, one-way functions, discrete logarithm, primality testing, secret key exchange, public key cryptosystems, digital signatures, and key escrow			

Institute for NanoBio Technology

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.670.497	01			**Animation in Nanotechnology & Medicine** *Searson, Peter C*	3.00	15	MTh 3:00-4:15PM

Materials Science & Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.510.103	01	EN		**Foundations of Nanotechnology** *Wilson, Orla* This course will be a survey of the rapidly developing field of nanotechnology from an interdisciplinary point of view. Topics covered will include a general introduction to the nanoworld, fabrication, characterization and applications of hard and soft nanomaterials, as well as examining nanotechnology in terms of its societal, ethical, economic and environmental impact.	3.00	50	MWF 11:00-11:50AM
EN.510.107	01	N		**Modern Alchemy** *Spicer, James* Can you really turn lead into gold? Converting common substances into useful materials that play important roles in today's technologies is the goal of many modern scientists and engineers. In this course, we will survey selected topics related to modern materials, the processes that are used to make them as well as the inspiration that led to their development. Topics will include the saga of electronic paper, the sticky stuff of gecko feet and the stretchy truth of metal rubber.	3.00	50	TTh 1:30-2:45PM
EN.510.201	01	EN		**Introductory Materials Science for Engineers** *Ma, En* An introduction to the structure, properties, and processing of materials used in engineering applications. After beginning with the structure of materials on the atomic and microscopic scales, this course explores defects and their role in determining materials properties, the thermodynamics and kinetics of phase transformations, and ways in which structure and properties can be controlled through processing. Previously: Introduction to Engineering Materials.	3.00	30	MWF 10:00-10:50AM
EN.510.202	01	EN		**Computation and Programming for Materials Scientists and Engineers** *Falk, Michael L* This course will introduce students to the basics of programming in the MATLAB environment. Students will build skills in algorithmic problem solving by programming assignments regarding a range of biological and non-biological materials systems. Students will learn to write function definitions and deploy basic operations of selection and iteration as well as MATLAB specific vectorization methods and the construction of graphical user interfaces. Applications may include materials structure, phase equilibrium, propagating reactions, and other relevant scientific and engineering applications.	3.00	25	MW 1:30-2:45PM

Materials Science & Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.510.313	01	EN		**Mech Property-Materials** *Cammarata, Robert C* Prereqs: 510.311 and 510.202 or another programming course, or permission of instructor. Third of the Introduction to Materials Science series, this course is devoted to a study of the mechanical properties of materials. Lecture topics include elasticity, anelasticity, plasticity, and fracture. The concept of dislocations and their interaction with other lattice defects is introduced.	3.00	60	MWF 11:00-11:50AM
EN.510.314	01	EN		**Electron Prop-Material** *Poehler, Theodore O* Prereqs: 510.311 and 510.202 or another programming course, or permission of instructor. Fourth of the Introduction to Materials Science series, this course is devoted to a study of the electronic, optical and magnetic properties of materials. Lecture topics include electrical and thermal conductivity, thermoelectricity, transport phenomena, dielectric effects, piezoelectricity, and magnetic phenomena.	3.00	40	MWF 9:00-9:50AM
EN.510.315	01	EN		**Physical Chem of Mat II** *Mueller, Timothy K* Prereqs: 510.311, 510.312 and 510.202 or another programming course, or permission of instructor. Fifth of the Introduction to Materials Science series, this course covers diffusion and phase transformations in materials. Topics include Fick's laws of diffusion, atomic theory of diffusion, diffusion in multi-component systems, solidification, diffusional and diffusionless transformations, and interfacial phenomena.	3.00	50	MWF 10:00-10:50AM
EN.510.400	01	EN		**Introduction to Ceramics** *Mcguiggan, Patricia* This course will examine the fundamental structure and property relationships in ceramic materials. Areas to be studied include the chemistry and structure of ceramics and glasses, microstructure and property relationships, ceramic phase relationships, and ceramic properties. Particular emphasis will be placed on the physical chemistry of particulate systems, characterization, and the surface of colloid chemistry of ceramics. Prereq: 510.311, 510.312, or permission of instructor.	3.00	25	TTh 10:30-11:45AM
EN.510.405	01	EN		**Energy Engineering: Fundamentals and Future** *Erlebacher, Jonah D* This course examines the science and engineering of contemporary and cutting-edge energy technologies. Materials Science and Mechanical Engineering fundamentals in this area will be complemented by case studies that include fuel cells, solar cells, lighting, thermoelectrics, wind turbines, engines, nuclear power, biofuels, and catalysis. Students will consider various alternative energy systems, and also to research and engineering of traditional energy technologies aimed at increased efficiency, conservation, and sustainability. Prerequisite: undergraduate course in thermodynamics.	3.00	25	TTh 10:30-11:45AM

Materials Science & Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.510.407	01	EN		**Biomaterials II: Host response and biomaterials applications** *Hristova, Kalina A* Prereq: 510.316 This course focuses on the interaction of biomaterials with the biological system and applications of biomaterials. Topics include host reactions to biomaterials and their evaluation, cell-biomaterials interaction, biomaterials for tissue engineering applications, biomaterials for controlled drug and gene delivery, biomaterials for cardiovascular applications, biomaterials for orthopedic applications, and biomaterials for artificial organs. Also listed as 510.607	3.00	60	MWF 11:00-11:50AM
EN.510.422	01	EN		**Micro/Nano Structured Mats/Devices** *Ma, En* Almost every material's property changes with scale. We will examine ways to make micro- and nano-structured materials and discuss their mechanical, electrical, and chemical properties. Topics include the physics and chemistry of physical vapor deposition, thin film patterning, and microstructural characterization. Particular attention will be paid to current technologies including computer chips and memory, thin film sensors, diffusion barriers, protective coatings, and microelectromechanical (MEMS) devices.	3.00	48	TTh 4:30-5:45PM
EN.510.429	01	EN	W	**Materials Science Lab II** *Wilson, Orla* Prereq: 510.311 or Perm. Req'd Lab is assigned by the instructor This laboratory concentrates on the experimental investigation of electronic properties of materials using basic measurement techniques. Topics include thermal conductivity of metal alloys, electrical conductivity of metals/metal alloys and semiconductors, electronic behavior at infrared wavelengths, magnetic behavior of materials, carrier mobility in semiconductors and the Hall effect in metals and semiconductors.	3.00	25	Th 12:00-1:15PM; Th 1:30-3:50PM
EN.510.429	02	EN	W	**Materials Science Lab II**	3.00	25	Th 12:00-1:15PM; Th 1:30-3:50PM
EN.510.430	01	EN	W	**Biomaterials Lab** *Mao, Hai-Quan* This laboratory course concentrates on synthesis, processing and characterization of materials for biomedical applications, and characterization of cell-materials interaction. Topics include synthesis of biodegradable polymers and degradation, electrospinning of polymer nanofibers, preparation of polymeric microspheres and drug release, preparation of plasmid DNA, polymer-mediated gene delivery, recombinant protein synthesis and purification, self-assembly of collagen fibril, surface functionalization of biomaterials, cell culture techniques, polymer substrates for cell culture, and mechanical properties of biological materials. Prerequisite: 510.407	3.00	10	MF 1:30-4:30PM
EN.510.434	01	EN		**Design Rsch Material Sci** *Wilson, Orla*	3.00	30	W 3:00-4:15PM; M 12:00-12:50PM

Materials Science & Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 510.311-312, 510.428-429, and 510.433 This course is the second half of a two-semester sequence required for seniors majoring or double majoring in materials science and engineering. It is intended to provide a broad exposure to many aspects of planning and conducting independent research.			
EN.510.443	01	EN		**Chemistry and Physics of Polymers** *Katz, Howard E* The course will describe and evaluate the synthetic routes, including condensation and addition polymerization, to macromolecules with varied constituents and properties. Factors that affect the efficiencies of the syntheses will be discussed. Properties of polymers that lead to technological applications will be covered, and the physical basis for these properties will be derived. Connections to mechanical, electronic, photonic, and biological applications will be made. Also listed as 510.643. Prerequisites: Organic Chemistry I and one semester of thermodynamics	3.00	25	TTh 10:30-11:45AM

Mechanical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.520.353	01	EQ		**Control Systems** *Tarraf, Danielle* Prereq: 520.214 & 110.201 or 550.291 Modeling, analysis, and an introduction to design for feedback control systems. Topics include state equation and transfer function representations, stability, performance measures, root locus methods, and frequency response methods (Nyquist, Bode).	3.00	30	TTh 10:30-11:45AM
EN.530.102	01	E		**Freshman Experiences in Mechanical Engineering** *Belkoff, Stephen M* Prereq: 530.101 An overview of the field of mechanical engineering along with topics that will be important throughout the mechanical engineering program. This is the second half of a one-year course that includes applications of mechanics, elementary numerical analysis, programming in Matlab, use of computer data acquisition, analysis, design, and visualization; technical drawing, the design process and creativity, report preparation, teamwork, and engineering ethics.	2.00	60	MW 3:00-3:50PM
EN.530.104	01	EN		**Introduction to Mechanics II** *Thomas, John A* Prereq: 530.103 This is the second half of a one-year course offering in-depth study of elements of mechanics, including linear statics and dynamics, rotational statics and dynamics, thermodynamics, fluids, continuum mechanics, transport, oscillations, and waves. This is an alternate to 171.101, designed specifically for Mechanical Engineering and Engineering Mechanics students taking 530.102 concurrently.	2.00	60	MW 1:30-2:20PM
EN.530.106	01	E		**Mechanical Engineering Freshman Lab II** *Belkoff, Stephen M* Prereq: 530.105 Hands-on laboratory complementing 530.102 and 530.104, including experiments, mechanical dissections, and design experiences distributed throughout the year. Experiments are designed to give student background in experimental techniques as well as to reinforce physical principles. Mechanical dissections connect physical principles to practical engineering applications. Design projects allow students to synthesize working systems by combining mechanics knowledge and practical engineering skills.	1.00	15	W 2:00-3:50PM
EN.530.106	02	E		**Mechanical Engineering Freshman Lab II**	1.00	15	W 4:00-5:50PM
EN.530.106	03	E		**Mechanical Engineering Freshman Lab II**	1.00	15	Th 4:00-5:50PM
EN.530.106	04	E		**Mechanical Engineering Freshman Lab II**	1.00	15	F 4:00-5:50PM
EN.530.202	01	E		**Dynamics** *Nakata, Narutoshi*	4.00	12	TTh 10:30-11:45AM; W 2:00-4:00PM

Mechanical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Basic principles of classical mechanics applied to the motion of particles, system of particles and rigid bodies. Kinematics, analytical description of motion; rectilinear and curvilinear motions of particles; rigid body motion. Kinetics: force, mass, and acceleration; energy and momentum principles. Introduction to vibration. Includes laboratory experience.			
EN.530.202	02	E		**Dynamics**	4.00	12	TTh 10:30-11:45AM; W 4:00-6:00PM
EN.530.202	03	E		**Dynamics**	4.00	12	TTh 10:30-11:45AM; Th 4:00-6:00PM
EN.530.202	04	E		**Dynamics**	4.00	12	TTh 10:30-11:45AM; F 2:00-4:00PM
EN.530.202	05	E		**Dynamics**	4.00	12	TTh 10:30-11:45AM; F 4:00-6:00PM
EN.530.215	01	E		**Mechanics-Based Design** *Marra, Steven P* Prereq: 530.201 Stresses and strains in three dimensions, transformations. Combined loading of components, failure theories. Buckling of columns. Stress concentrations. Introduction to the finite element method. Design of fasteners, springs, gears, bearings, and other components.	3.00	60	MWF 11:00-11:50AM
EN.530.216	01	E		**Mechanics Based Design Laboratory** *Marra, Steven P* This is the laboratory that supports 530.215 Mechanics Based Design.	1.00	12	M 4:00-5:50PM; T 6:00-7:00PM
EN.530.216	02	E		**Mechanics Based Design Laboratory**	1.00	12	T 3:30-5:20PM; T 6:00-7:00PM
EN.530.216	03	E		**Mechanics Based Design Laboratory**	1.00	12	W 3:30-5:20PM; T 6:00-7:00PM
EN.530.216	04	E		**Mechanics Based Design Laboratory**	1.00	12	Th 1:30-3:20PM; T 6:00-7:00PM
EN.530.216	05	E		**Mechanics Based Design Laboratory**	1.00	12	Th 3:30-5:20PM; T 6:00-7:00PM
EN.530.241	01	E		**Electronics & Instrumentation** *Staff* Prereqs: Physics II Coreqs: one of three Linear Algebra and Differential Equations course options: 1) 550.291, 2) both 110.201 and 110.302, or 3) both 110.201 and 110.306. - Introduction to basic analog electronics and instrumentation with emphasis on basic electronic devices and techniques relevant to mechanical engineering. Topics include basic circuit analysis, laboratory instruments, discrete components, transistors, filters, op-amps, amplifiers, differential amplifiers, power amplification, power regulators, AC and DC power conversion, system design considerations (noise, precision, accuracy, power, efficiency), and applications to engineering instrumentation.	4.00	22	MWF 1:30-2:20PM; W 4:00-6:50PM
EN.530.241	02	E		**Electronics & Instrumentation**	4.00	22	MWF 1:30-2:20PM; W 7:00-9:50PM
EN.530.241	03	E		**Electronics & Instrumentation**	4.00	22	MWF 1:30-2:20PM; Th 6:00-8:50PM
EN.530.334	01	E		**Heat Transfer** *Prosperetti, Andrea*	3.00	65	MWF 10:00-10:50AM; F 12:00-12:50PM

Mechanical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prereq: 530.231 and 530.327 Steady and unsteady conduction in one, two, and three dimensions. Elementary computational modeling of conduction heat transfer. External and internal forced convection. Performance and design of heat exchangers. Boiling and condensation. Black-body and gray-body radiation, Stefan-Boltzmann law view factors and some applications.			
EN.530.335	01	E		**Heat Transfer Laboratory** *Marra, Steven P* This is the laboratory that supports 530.334 Heat Transfer.	1.00	16	TBA; W 6:00-7:00PM
EN.530.335	02	E		**Heat Transfer Laboratory**	1.00	16	W 6:00-7:00PM; TBA
EN.530.335	03	E		**Heat Transfer Laboratory**	1.00	16	TBA; W 6:00-7:00PM
EN.530.335	04	E		**Heat Transfer Laboratory**	1.00	16	TBA; W 6:00-7:00PM
EN.530.343	01	E		**Design and Analysis of Dynamical Systems** *Marra, Steven P* Prereq: (110.108 and 110.109 and (110.202 or 110.211) and ((550.291) or (110.201 and 110.302) or (110.201 and 110.306)), and C- or better or concurrent enrollment in 530.202 or 560.202. MechE Majors must also have taken 530.241 Modeling and analysis of damped and undamped, forced and free vibrations in single and multiple degree-of-freedom linear dynamical systems. Introduction to stability and control of linear dynamical systems.	4.00	18	MWF 9:00-9:50AM; M 6:00-8:50PM
EN.530.343	02	E		**Design and Analysis of Dynamical Systems**	4.00	18	MWF 9:00-9:50AM; Th 2:30-5:20PM
EN.530.343	03	E		**Design and Analysis of Dynamical Systems**	4.00	18	MWF 9:00-9:50AM; F 1:30-4:20PM
EN.530.354	01	E		**Manufacturing Engineering** *Ronzhes, Yury* Mechanical Engineering and Engineering Mechanics Sophomores and Juniors only. An introduction to the various manufacturing processes used to produce metal and nonmetal components. Topics include casting, forming and shaping, and the various processes for material removal including computer-controlled machining. Simple joining processes and surface preparation are discussed. Economic and production aspects are considered throughout. Special Notes: Labs and field trips will be scheduled with class separately.	3.00	60	TBA
EN.530.381	01	E		**Engineering Design Process** *Dehghani, Mohammad M*	3.00	60	TBA

Mechanical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Goal of the course is to teach students the iterative process of design from requirement establishment, to generation of (many) concepts, to decision making and criteria based concept selection. The four C's of design; Creativity, Complexity, Choice, and Compromise will be explored. The processes of functional decomposition, modeling and simulation and assessment of Risk, Reliability and Safety will be covered. Modern tools of design and their interfaces with manufacturing and Product Lifecycle Management (PLM) tools will be presented. Throughout the course teams of students will maintain a record of design process as it relates to a specific term project. The progress of the design will be reported according the principles of project management. This course will equip students with tools needed for success in Senior Design.			
EN.530.404	01	E	W	**Engineering Design Project II** *Scott, Nathan William* Prereq: 540.403 The Senior Design Project, a unique two-semester course, is the capstone of Johns Hopkins's Mechanical Engineering Program. In the class, students working in small teams tackle specific design challenges presented by industry, government, and nonprofit organizations. The sponsors provide each team with a budget, access to world-class resources, and technical contacts. Ultimately, each team conceptualizes a novel solution to the sponsor's problem and then designs, constructs, and tests a real-world prototype before presenting the finished product and specifications to the sponsor. The course requires students to draw upon the four years of knowledge and experience they've gained in their engineering studies and put it to practical use. Throughout the year, they produce progress reports as they design, build, and test the device they are developing. Combining engineering theory, budget and time management, and interactions with real clients, the senior design project is critical to students' preparation for the transition from school to the workplace.	4.00	50	TBA
EN.530.410	01	EN		**Biomechanics of the Cell** *Sun, Sean X* Mechanical aspects of the cell are introduced using the concepts in continuum mechanics. Discussion of the role of proteins, membranes and cytoskeleton in cellular function and how to describe them using simple mathematical models.	3.00	50	MWF 4:30-5:20PM
EN.530.421	01	E		**Mechatronics** *Chirikjian, Gregory Scott*	3.00	14	M 1:30-4:20PM; W 8:00-8:50AM

Mechanical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Students from various engineering disciplines are divided into groups of two to three students. These groups each develop a microprocessor-controlled electromechanical device, such as a mobile robot. The devices compete against each other in a final design competition. Topics for competition vary from year to year. Class instruction includes fundamentals of mechanism kinematics, creativity in the design process, an overview of motors and sensors, and interfacing and programming microprocessors. Prerequisite: 530.420 or instructor's permission required			
EN.530.421	02	E		**Mechatronics**	3.00	13	W 1:30-4:20PM; W 8:00-8:50AM
EN.530.421	03	E		**Mechatronics**	3.00	13	F 1:30-4:20PM; W 8:00-8:50AM
EN.530.444	01	E		**Computer-Aided Fluid Mechanics and Heat Transfer** *Herman, Cila* Computer simulation has become an essential part of science and engineering and this course introduces the student to the use of computer simulation in the disciplines of heat transfer and fluid mechanics. The commercial software COMSOL is used a wide variety of problems, ranging from simple models for which analytical solutions are available, to complex, unsteady, multiphysics real-life problems. Problems will be solved by identifying proper governing equations and boundary conditions first, and then implementing these in the COMSOL environment. Applications will include heat conduction, convection and radiation, internal and external flows, with applications ranging from mechanical to biomedical and aerospace engineering.	3.00	25	TBA
EN.530.452	01	E		**Cell & Tissue Engineering Lab** *Haase, Eileen B* This laboratory course will consist of three experiments that will provide students with valuable hands-on experience in cell and tissue engineering. Experiments include the basics of cell culture techniques, gene transfection and metabolic engineering, basics of cell-substrate interactions I, cell-substrate interactions II, and cell encapsulation and gel contraction. $100 lab fee will be charged. Co-listed with 580.452	2.00	20	TF 12:00-1:15PM
EN.530.452	02	E		**Cell & Tissue Engineering Lab** *Wang, Jeff T*	2.00	20	TF 2:00-3:50PM
EN.530.464	01	E		**Energy Systems Analysis** *Gayme, Dennice F*	3.00	20	TTh 4:30-5:45PM

Mechanical Engineering

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				Prerequisite: Basic Linear Alegbra (550.291, 110.201, or equivalent acceptable). This course discusses the grid integration of renewable energy systems. The main emphasis is on grid level effects of renewable energy, particularly wind power systems. It begins with an introduction to basic power system concepts along with power flow analysis (and optimization). Then, important concepts for wind power systems are discussed. Following that, integration issues for wind power at the transmission level and solar cell integration at the distribution level are introduced. The last part of the course will focus on current research in these areas. Students will choose a system to research and present a project or literature review at the end of the term. Prior knowledge of optimization is helpful, but not required.			
EN.530.470	01	E		**Space Vehicle Dynamics & Control** *McGee, Timothy Garland* In this course we study applied spacecraft orbital and attitude dynamics and their impact on other subsystems. In the orbital dynamics part of the course, we discuss some the issues associated with orbital insertion, control and station keeping. Focus is on the two-body problem regime where conic solutions are valid. Orbit perturbations are also considered. For attitude dynamics, different attitude representations such as of direction cosines, quaternions, and angles are introduced. Then we look at the forces and moments acting on space vehicles. Attitude stability and control considerations are introduced.	3.00	40	TTh 9:00-10:30AM

Professional Communication

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
EN.661.110	01		W	**Professional Communication for Science, Business and Industry** *Staff* (formerly as both Technical Communication and Business Communication) This course teaches students to communicate effectively with a wide variety of specialized and non-specialized audiences. Projects include production of resumes, cover letters, proposals, instructions, reports, and other relevant documents. Class emphasizes writing clearly and persuasively, creating appropriate visuals, developing oral presentation skills, working in collaborative groups, giving and receiving feedback, and simulating the real world environment in which most communication occurs. Not open to students who have taken 661.110 as Technical Communication or 661.120 Business Communication. No audits.	3.00	20	TTh 9:00-10:15AM
EN.661.110	02		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 10:30-11:45AM
EN.661.110	03		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 10:30-11:45AM
EN.661.110	04		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 12:00-1:15PM
EN.661.110	05		W	**Professional Communication for Science, Business and Industry**	3.00	20	TTh 1:30-2:45PM
EN.661.110	06		W	**Professional Communication for Science, Business and Industry** *Quesenberry, Keith*	3.00	20	MW 12:00-1:15PM
EN.661.110	07		W	**Professional Communication for Science, Business and Industry** *Staff*	3.00	20	W 6:15-9:00PM
EN.661.110	08		W	**Professional Communication for Science, Business and Industry**	3.00	20	M 1:30-4:15PM
EN.661.111	01		W	**Professional Communication for ESL Students** *Davis, Laura* This course teaches ESL students to communicate effectively with a wide variety of specialized and non-specialized audiences and will provide ESL-specific help with grammar, pronunciation, and idiomatic expression in these different contexts. Projects include production of resumes, cover letters, proposals, instructions, reports, and other relevant documents. Class emphasizes writing clearly and persuasively, creating appropriate visuals, developing oral presentation skills, working in collaborative groups, giving and receiving feedback, and simulating the real world environment in which most communication occurs. Note: not open to students who have taken 661.110 as Technical Communication or Professional Communication for Science, Business, and Industry or 661.120 Business Communication. Co-listed with 661.611. No audits.	3.00	12	TTh 4:30-5:45PM
EN.661.150	01		W	**Oral Presentations** *Dungey, Kevin R*	3.00	13	M 3:00-5:45PM

Professional Communication

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				This course is designed to help students push through any anxieties about public speaking by immersing them in a practice-intensive environment. They learn how to speak with confidence in a variety of formats and venues - Including extemporaneous speaking, job interviewing, leading a discussion, presenting a technical speech, and other relevant scenarios. Students learn how to develop effective slides that capture the main point with ease and clarity, hone their message, improve their delivery skills, and write thought-provoking, well-organized speeches that hold an audience's attention. No audits.			
EN.661.150	02		W	**Oral Presentations**	3.00	13	M 6:15-9:00PM
EN.661.150	03		W	**Oral Presentations** *Reiser, Julie*	3.00	13	T 1:30-4:15PM
EN.661.150	04		W	**Oral Presentations** *Heiserman, Jason*	3.00	13	T 4:30-7:15PM
EN.661.150	05		W	**Oral Presentations** *Sheff, Pamela*	3.00	13	W 1:30-4:15PM
EN.661.150	06		W	**Oral Presentations** *O'Donnell, Charlotte Alyssa*	3.00	13	W 5:00-7:45PM
EN.661.150	07		W	**Oral Presentations** *Kulanko, Andrew*	3.00	13	Th 1:30-4:15PM
EN.661.150	08		W	**Oral Presentations**	3.00	13	Th 5:00-7:45PM
EN.661.151	01		W	**Oral Presentations for ESL** *Davis, Laura* This course is designed to help students push through any anxieties about public speaking by immersing them in a practice-intensive environment. They learn how to speak with confidence in a variety of formats and venues - Including extemporaneous speaking, job interviewing, leading a discussion, presenting a technical speech, and other relevant scenarios. Students learn how to develop effective slides that capture the main point with ease and clarity, hone their message, improve their delivery skills, and write thought-provoking, well-organized speeches that hold an audience's attention. Special attention will be placed on diction, pronunciation, tone, pace and emphasis of language. Additional attention also will be given to syntax as well as non-verbal communication patterns. Co-listed with 661.651. No audits.	3.00	13	W 1:30-4:15PM
EN.661.170	01			**Visual Rhetoric** *O'Donnell, Charlotte Alyssa* A course that aims to help students design clearer, more visually engaging graphics for a wide variety of business and technical documents. Students will learn to manage essential principles of graphic design through a variety of graphic (Adobe Creative Suite) and MS Office software. Topics will include logos, letterhead, event posters, brochures, data graphics and some basic web design. No audits.	3.00	15	T 1:30-4:15PM
EN.661.315	01	S	W	**The Culture of the Engineering Profession** *Rice, Eric*	3.00	24	TTh 10:30-11:45AM

Professional Communication

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				For Engineering sophomores, juniors and seniors or by permission of instructor. This course focuses on building understanding of the culture of engineering while preparing students to communicate effectively with the various audiences with whom engineers interact. Working from a base of contemporary science writing (monographs, non-fiction, popular literature and fiction), students will engage in discussion, argument, case study and project work to investigate: the engineering culture and challenges to that culture, the impacts of engineering solutions on society, the ethical guidelines for the profession, and the ways engineering information is conveyed to the range of audiences for whom the information is critical. Additionally, students will master many of the techniques critical to successful communication within the engineering culture through a series of short papers and presentations associated with analysis of the writings and cases. No audits.			
EN.661.315	02	S	W	**The Culture of the Engineering Profession** *Sheff, Pamela*	3.00	24	TTh 12:00-1:15PM
EN.661.317	01	S	W	**The Culture of the Medical Profession** *Sheff, Pamela* For sophomores, juniors, and seniors or by permission of instructor. This course builds understanding of the culture of medicine as well as the ways in which different strata within society have access to and tend to make decisions about health and health related services while preparing students to communicate effectively with the various audiences with whom medical professionals interact. Working from a base of contemporary science writing (monographs, non-fiction, popular literature and fiction), students engage in discussion, argument, case study and project work to investigate topics such as the medical culture, the ways medicine is viewed by different segments of society, issues associated with access to health care, ethical dilemmas and guidelines for medical decisions, the impacts of medical and engineering solutions on society, decision making within client/patient groups, social and cultural differences that effect behavioral change, and the ways medical information is conveyed to the range of audiences for whom the information is critical. Additionally, students will master many of the techniques critical to successful in communication through a series of short papers and presentations associated with analysis of the writings and cases. No audits.	3.00	24	M 1:30-4:15PM
EN.661.410	01	S	W	**Research Writing for ESL** *Link-Farajali, Denise*	3.00	5	M 6:00-8:45PM

Professional Communication

Crse	Sect	Area	WI	Title	Credits	Limit	Day/Time
				(This course is designed to help ESL writers succeed in writing, editing, and completing a large research project specific to their discipline. This could be a research report, journal article, literature review, dissertation chapter, grant proposal, or other relevant document. The course provided intensive help with grammar, idiomatic phrasing, and overall clarity for writers whose native language is not English. The course includes both individual consultation and group workshops. Undergraduates are required to be conducting research with a faculty member or by special permission of instructor. S/U grading only (students may elect to take this course for a traditional letter grade if their departments require them to do so; students must inform the instructor by the second week of class). Co-listed with 661.610. No audits.			
EN.661.454	01		W	**Blogging, Editing and Copywriting** *Quesenberry, Keith* This course will teach students how to develop, write, and manage content for social media. Students will gain significant experience in both freelance and managerial-level contexts. In this highly experiential course, students will create and market their own blog, solicit and do copywriting for clients, and manage the content creation process for a collaborative class project. The course will emphasize best practices for search engine optimization (SEO), intuitive design, social media metrics, freelance project management skills (querying/soliciting for new work, invoicing, and client retention), and content management strategies appropriate for publishing, marketing, and other relevant environments. Pre-requisite: one writing course in any discipline (professional communication, expository writing, or writing seminars).	3.00	15	TTh 1:30-2:45PM
EN.661.487	01		W	**Advanced Communication Skills for Science and Engineering** *Reiser, Julie* This course helps students build advanced communication skills that are critical for leveraging their academic experience in the "real world." Course emphasizes reporting information, polishing CVs and resumes, presenting conference papers, participating in poster sessions, tailoring information to both specialist and non-specialist audiences, and writing grant proposals for funding. Undergraduates are required to be conducting research with a faculty member or by special permission of instructor. Co-listed with 661.687. No audits.	3.00	15	TTh 12:00-1:15PM