

College	Department	Course #	Name	Description	S/IS
	Anthropology	ANT 2000	Introduction to Anthropology	This introductory course offers a holistic approach to understanding what it means to be human, studying humans and human behavior from the perspectives of evolution and genetics, the archaeological record, and language and culture.	IS
		ANT 2410	Introduction to Cultural Anthropology	This course introduces global diversity through the discipline of cultural anthropology which explores and analyzes the commonalities across societies as well as the unique diversity of human societies and cultures. The course introduces key concepts including kinship, gender, culture, religion, race, consumption, nationalism, and globalization, and provides an opportunity to learn more about these concepts in a variety of social and cultural contexts around the world.	IS
		ANT 2511	Introduction to Physical Anthropology and Prehistory	This course introduces theory and principles of genetically based evolution. It reviews fossil evidence for human evolution and competing ideas about the specific pathways to modern humans. It emphasizes the genetic unity of humankind and the universal features that underlie individual and cultural diversity.	IS
		ANT 3141	World Prehistory	This course outlines the major events in human cultural and social evolution and includes a brief presentation of general archaeological methods and objectives. The course focuses on the evolution of civilization in the Middle East, Europe, China, Africa, and the Americas.	IS
		ANT 3451	Race: Biology and Culture	This course examines the concept of race from the perspectives of biological and cultural anthropology, beginning with the study of modern human biological variation and its clinical distribution. This biological patterning is then contrasted with the social categories of race. The final section of the course covers the history of the concept of race, the ways humans culturally construct divisions in different societies, and the continued effects of racial concepts on science and on modern cultures.	S
		ANT 4465	Foodways Archaeology	This course addresses the topic of food from an anthropological archaeological perspective. The course examines the role food played in shaping identity, gender construction, ethnicity and rituals in past societies. The course also works to engage other disciplinary perspectives, such as those from history, literature, economics and environmental studies, as it attempts to make larger connections with the ways in which food and eating are holistically approached from an anthropological perspective.	S
		BOT 3015	Plant Biology	This course is an introduction to evolutionary relationships, natural history, ecological adaptations, and physiology of plants, fungi, autotrophic protista, and prokaryotes.	IS

BOT 3015L	Plant Biology Laboratory	This course introduces evolutionary relationships, natural history, ecological adaptations, and the physiology of plants, fungi, autotrophic protista, and prokaryotes.	IS
BOT 3143C	Field Botany	This course is an introduction to plant taxonomy with emphasis on laboratory and field study. Orientation to principles of identification, classification, and rules of botanical nomenclature.	IS
BOT 4394	Plant Molecular Biology	This course explores molecular biology and biotechnology of plant growth and development.	IS
BOT 4503	Plant Physiology	This course provides students with a comprehensive overview of plant physiology. Plant physiology is the study of plant processes, structure and function. Physiology describes the mechanisms used by living organisms to solve problems they encounter as they grow and develop. Plants are unique, as sessile, photoautotrophic organisms, and diverse. As such, plants provide the opportunity to study many interesting physiological topics and mechanisms.	IS
BOT 4503L	Plant Physiology Laboratory	This lab provides students with a comprehensive overview of plant physiology. Plant physiology is the study of plant processes, structure and function. Physiology describes the mechanisms used by living organisms to solve problems they encounter as they grow and develop. Plants are unique, as sessile, photoautotrophic organisms, and diverse. As such, plants provide the opportunity to study many interesting physiological topics and mechanisms.	IS
BSC 1005	General Biology for Non-majors	This course consists of four selected topics in contemporary biology.	IS
BSC 1005L	General Biology Laboratory for Nonmajors		IS
BSC 2010	Biological Science I	The course provides the building blocks necessary for a student to gain a strong foundation in general biology. Topics covered provide an overview of biological processes and function at the molecular, cellular and organismal level.	IS
BSC 2010L	Biological Science I Laboratory	This course introduces basic chemistry, energetics, metabolism, and cellular organization; molecular genetics and information flow; animal and plant function.	IS
BSC 2011	Biological Science II	The course provides an overview of the processes underlying animal embryonic development, inheritance genetics, evolution and ecology.	IS
BSC 2011L	Biological Science II Lab	This course focuses on reproduction and development, transmission (Mendelian) genetics, population biology, ecology, and evolution.	IS

BSC 2085	Anatomy and Physiology I	This course is the first of a two-semester human anatomy/physiology sequence emphasizing the cell, stimulus-response concept, and the skeletal-muscular and first half of the nervous systems.	IS
BSC 3016	Eukaryotic Diversity	This course provides an overview of the diversity of eukaryotic organisms (protists, plants, fungi and animals), the evolutionary origin of this diversity, and its societal relevance. Comparisons of exemplar organisms are used to illustrate broad themes in the anatomy, physiology, behavior, life cycles, and ecologies of all eukaryotes.	IS
BSC 3052	Conservation Biology	This course focuses on the history of the conservation movement, the research on populations of animals and plants that is relevant to man's impact upon the environment, pollution in terrestrial and aquatic ecosystems, endangered species, government regulation, and sustainable development. Ecology and evolution behind conservation and management of biological diversity.	IS
BSC 3312	Marine Biology	This course explores marine geology, chemistry of the oceans, oceanic circulation, oceanographic techniques, the marine environment and marine life.	IS
BSC 3402L	Experimental Biology Laboratory	This course is designed to teach students about the process of biological research. Each section of the course is organized around a particular biological concept. The focus in this course is two-fold. First, students are provided with basic background in the field of study. This is done through lab work and lecture. Students are provided with documents to help them with their work. Second, and more important, is the development of skills in biological research. The skills are developed in laboratory and lecture exercises as well as outside of class assignments, culminating in an independent research project, which they present both orally and in writing. This course meets the University's Oral Communication Competency Requirement, and the Upper Division Writing Requirement. Developing oral and written communication skills are major components of this course.	IS
BSC 3930	Seminar in Biological Frontiers	This course is a weekly seminar covering topics in biological research.	IS
BSC 3938	Careers in the Biological Sciences	This course is intended for biology sciences majors at any point in their undergraduate career, but is most beneficial to those in their first three years. Career options in biology-related fields (including health professions) and the preparation they require are presented for students planning to immediately enter the job market or to continue their academic careers upon graduation.	IS

BSC 4821c	Biogeography	This course will cover the full range of biogeography with an emphasis on ecological and evolutionary biogeography, the processes that help determine distributions, and the analytical methods used to describe distributions and test processes. Topics include the physical environment (geology, meteorology), the distribution of ecosystems and biomes across the globe, speciation, common geographic patterns, diversity gradients, island biogeography, and historical (evolutionary) biogeography. There is a laboratory section as part of this course in which student working in groups will analyze geographic data sets to search for patterns and test hypotheses with the scientific method.	IS
BSC 4931	Senior Tutorial in Biological Science	This course focuses on selected topics in contemporary biological science.	IS
BSC 4937	Seminar in Living Marine Resource Ecology	This seminar course in marine resource ecology designed to introduce students to a broad array of current research priorities and interests in marine ecology. Students have the opportunity to meet with resource managers and scientists from both the biological and social fields. Lecture topics range from life history studies of marine fish to the economic consequence of marine policy.	IS
BSC 4941	Internship in Biological Science I	This internship course is designed for majors in the department of Biological Science who wish to gain real world experience in their field of interest through on-the-job practice.	IS
BSC 4941r	Internship in Biological Science II	This internship course is designed for majors in the department of Biological Science who wish to gain real world experience in their field of interest through on-the-job practice.	S
GEO 4300	Biogeography	This course emphasizes ecological and evolutionary biogeography, the physical processes and organismal characteristics that determine distributions, and the analytical methods used to describe distributions and test processes. Geographic data sets are analyzed in lab sessions to search for patterns and test hypotheses with the scientific method.	IS
IDS 2132	Busting Common Biology Myths	This course explores areas of biology popularized in the media, politics and global health policies. Students determine strengths and weaknesses of opposing arguments of controversial current biological issues using information found in the scientific literature to support or critique positions. Popular biological issues such as pros and cons of vaccination, the use of stem cells, or the dangers of genetically modified organisms are studied.	S

Biological Science

IDS 2136	Biotechnology: Impact of Life and Sciences on Society	This course addresses the important impacts that new biotechnological innovations have on society. Using examples from genetically modified crops to advances in personalized medicine, students explore the scientific bases of emerging biotechnologies and compare the scientific data with societal perception and acceptance.	S
IDS 2470	The Ecology of Food	This course explores the basic ecology of agriculture and fisheries and consider how conventional and alternative food-production practices generate and solve ecological problems. The course focuses on several major current issues (e.g. genetically modified organisms, pollinator declines, organic agriculture, and fisheries), and for each students learn the science behind the issue and the social forces shaping the problem. Students also learn through discussions of scientific and popular writings, lectures, hands-on and written projects, oral presentations, local speakers and field trips.	S
IDS 3232	Living Green, Theory to Action	This course examines environmental issues, the three 'E's of sustainability (ecology, equity, and equality), ways to integrate sustainability into infrastructure and social structures, and practical solutions and skills for making personal and professional decisions that support living a sustainable life.	S
MCB 2004	Microbiology for Health Services	This course covers microbiology for students planning careers in the health services, with emphasis on infectious disease, food microbiology, and public health.	IS
MCB 2004L	Microbiology for the Health Services Laboratory	This course covers microbiological techniques including the isolation, typing, and identification of bacteria, properties of pathogenic bacteria, and food microbiology.	IS
MCB 4403	Prokaryotic Biology	This course covers structural and functional characteristics of microorganisms, with emphasis on prokaryotes (bacteria and archaea) and viruses. Topics include: prokaryotic cell structure and function, physiology and genetics of prokaryotes and viruses, physiological and molecular aspects of microorganisms and human disease, and biotechnological applications of microbial physiology (environmental, food, and industrial microbiology).	IS
MCB 4403L	Prokaryotic Biology Laboratory	This course covers laboratory methods for growth, handling, and study of prokaryotes and other types of microorganisms. Topics include: aseptic technique and isolation of pure cultures; microscopic methods; effects of environment on growth; viruses; physiological characterization methods; and methods related to medical, environmental, and food microbiology.	IS

MCB 4502	Virology	This course covers general virology including virus structure and replication cycles. Students review major families of the bacterial (bacteriophage) plant and animal viruses, with emphasis placed on human viruses and infectious diseases. Students also discuss subviral particles, prions and viroids.	IS
PCB 3043	General Ecology	This course focuses on topics such as: population biology; population growth; community processes, succession, nutrient cycling, and energy flow; species interactions; ecological efficiency; and biogeographical ecology.	IS
PCB 3043L	Ecology Lab	Students will be introduced to common questions and methods from basic and applied ecology using both lab and field exercises. These include quantifying effects of density, competition, and predation on populations, understanding food webs and trophic interactions, as well as the biogeography of movement and species ranges, succession in long-leaf pine forests, local stream biomonitoring, and foraging ecology.	IS
PCB 3043L	Lab for Ecology	In this course, topics covered include quantifying populations and population growth; species interactions such as competition, predation, and mutualisms; documenting community patterns across gradients; adaptation and traits of species; habitat use, movement and species ranges; natural history of local habitats	IS
PCB 3063	General Genetics	This course is an introduction to the principles of transmission and molecular genetics of prokaryotes and eukaryotes and significance of these principles to other aspects of biological science.	IS
PCB 3134	Cell Structure and Function	This course focuses on topics such as: cellular chemistry and physiology, morphology, and function of cellular organelles; and cellular motility, growth, division, communication, and regulation.	IS
PCB 4024	Molecular Biology	This course studies the molecular basis of cellular function with emphasis on the activities of DNA, RNA, and the regulation of gene expression.	IS
PCB 4233	Immunology	This course analyzes the tissues, cells, and molecules of the immune system and their relationships to disease and transplantation.	IS
PCB 4233L	Laboratory in Immunology	This course analyzes the tissues, cells, and molecules of the immune system and their relationships to disease and transplantation.	IS
PCB 4253	Developmental Biology	This course discusses a number of topics, including fertilization, early embryonic events, organogenesis, differentiation, morphogenesis, cytoplasmic localization, determination, and differential gene expression.	IS

PCB 4402	Ecology of Infectious Disease	This course explores how concepts and tools of basic ecology can and have been used to understand the dynamics of infectious disease, and contribute to our ability to predict, prevent, and control disease outbreaks. Students consider diseases of humans and their domesticated plants and animals, as well as the role of disease in natural systems. Students are also expected to read extensively in the primary literature, and to contribute to regular class activities and discussions as well as research and present information on specialized topics such as the role of conservation corridors in the spread of disease, possible responses to pandemics and bioterrorism, and identification of sources of emerging diseases.	IS
PCB 4674	Evolution	This course places emphasis on the processes of evolution: origin of life, theories of evolution, sources of variation, natural selection, population systems, isolating mechanisms, evolution above the species level.	IS
PCB 4843	Fundamentals of Neuroscience	This course emphasizes cellular and molecular approaches to neuroscience and brain function and emphasizes simple model systems including invertebrates.	IS
ZOO 3141L	Animal Diversity Laboratory	This introductory zoology laboratory course provides an overview of the diversity of animal form and function through comparisons of exemplar organisms representing the major animal phyla. Students are expected to dissect preserved specimens and to make detailed observations of both live (invertebrate) and preserved animals. Students develop critical zoological laboratory skills in dissection, the correct use of both compound and dissecting microscopes, the ability to carefully observe and draw specimens and images from microscope slides, and the application of their knowledge on laboratory practicals. Outside assignments allow students to recognize the diversity among our local fauna. The knowledge and skills gained from this course provide a solid foundation for more specialized studies in animal biology.	IS
ZOO 3205	Advanced Invertebrate Zoology	This course focuses on the structure, function, behavior, and evolution of the invertebrate phyla, especially those taxa living in the sea.	IS
ZOO 3205L	Advanced Invertebrate Zoology Laboratory	This laboratory deals with the structure, function, behavior and ecology of the invertebrate phyla, especially those taxa living in the sea.	IS
ZOO 3713C	Comparative Vertebrate Anatomy	This course emphasizes form and function and origin and evolution of structure.	IS
ZOO 4353C	Biology of Higher Vertebrates	This course covers the systematics, ecology, and evolution of birds and mammals.	IS

ZOO 4454	Biology of Fishes	Introduction to the evolution, diversity, biology, ecology, and management of fishes	IS
ZOO 4513	Animal Behavior	This course discusses modern perspectives of the behaviors of animals.	IS
ZOO 4753C	Histology	This course explores the microscopic anatomy and functions of the cells, tissues, and glands composing the organs and systems of humans.	IS
ZOO 4926	Biology of Sharks & Rays	Introduction to the Evolution, diversity and biology of elasmobranch fishes with a focus on fishery and conservation issues.	IS
BCH 3023	Survey of Biochemistry	This course is designed to provide a survey of biochemistry topics relevant to those in the allied health and pre-medicine fields of study.	IS
BCH 3023L	Survey of Biochemistry Laboratory	This course focuses on application of molecular biology techniques to a broad range of biochemistry topics and provides a basic survey of information relevant to students in allied health and pre-medicine fields of study.	IS
BCH 4053	General Biochemistry I	This course is the first course required for biochemistry majors; the course is also recommended for other majors who intend to study advanced biochemistry. Topics covered include protein structure, protein function, membranes, enzyme catalysis, bioenergetics, carbohydrate metabolism, and lipid metabolism.	IS
BCH 4053L	General Biochemistry I Laboratory	This lab explores laboratory methods in biochemistry including electrophoresis, chromatography, cell fractionation, enzyme assays, ligand interactions, and recombinant DNA technology.	IS
BCH 4054	General Biochemistry II	This course is the second course required for biochemistry majors; it is also recommended for other majors who intend to study advanced biochemistry. Topics include quantitative analysis of assembly and mechanisms of molecular machines involved in metabolic and information transfer processes, how proteins bind proteins, nucleic acids, and ligands, as well as the methods for characterizing structures and interactions.	IS
CHM 1020	Chemistry for Liberal Studies	This course introduces basic chemical principles without an extensive use of mathematics and illustrates with applications in health, energy, and the environment. The course strives to show chemistry as a human endeavor that provides insight into the natural world and informs our decisions as citizens and consumers.	IS
CHM 1020L	Chemistry for Liberal Studies Laboratory	This laboratory emphasizes major topics from CHM 1020 relating chemistry concepts and techniques to everyday life experiences. This laboratory-based course meets two hours a week.	IS



Chemistry	CHM 3217	One Semester Organic Chemistry	This course provides a rigorous one semester overview of the structure, properties, and reaction of organic compounds. It is intended for students who are willing and able to move more quickly into advanced course work.	IS
	CHM 3218	One Semester Biochemistry	This course introduces the basic concepts of biochemistry and molecular biology from an organic chemistry structural and mechanistic perspective.	IS
	CHM 3218	One Semester Biochemistry	This course introduces the basic concepts of biochemistry and molecular biology from an organic chemistry structural and mechanistic perspective.	IS
	CHM 4080	Environmental Chemistry I	This course focuses on the application of geologic and geochemical principles to environmental issues. Topics include: an evaluation of contaminants in surface and ground water; hydrocarbon geochemistry and petroleum contamination; waste management, including solid, toxic and nuclear waste; air quality issues, including radon and asbestos; geologic hazards in upland and coastal areas; environmental methods and instrumentation, quality assurance and quality control in environmental analysis; principles of toxicology; risk assessment and risk management.	IS
	CHM 4081	Environmental Chemistry II	This course studies the organic geochemistry of natural waters and sediments. It offers an overview of the sources of organic matter in aquatic systems, the important reactions and transport mechanisms that control the biochemical cycling of organic carbon in these systems, and the impact of naturally-occurring organic carbon on environmental and ecological processes. Attention is also devoted to anthropogenic (xenobiotic) organic molecules. It also discusses how analytical techniques such as <sup>13</sup> C NMR, mass spectroscopy, and capillary electrophoresis provide useful organic biogeochemical information.	IS
	CHM 4714	Chemistry of Materials	This course is an introduction to materials chemistry, focusing on the structure, properties, and functional applications of molecular materials, polymers, glasses and ceramics, metals and alloys, and bio- and nanomaterials.	IS
	CLA 3501	Gender and Society in Ancient Greece	This course examines the role and status of women in ancient Greek society, as depicted in its literature, art, law, and religion.	IS

Classics	IDS 3033	The Animal in Ancient and Modern Thought	This course explores human attitudes toward non-human animals in ancient and modern culture. Students read a sampling of ancient and modern literature and philosophical thought and engage with a range of themes over the course of the semester, including beliefs about animal consciousness, human-animal social relationships, the use of animals in literature and art, and the ethics of <u>animal treatment</u> .	IS
Computer Science	CEN 4681	Expert Systems	This course covers definitions and historical development, methodology tools for analysis and design, survey of existing systems, inference engines, and theory and applications of fuzzy relational products to new developments in <u>inference engines</u> .	IS
	CIS 3250	Ethics and Computer Science	This course presents basic ethical theories and analysis methods as they apply to ethical, social, and legal issues in computing and information technology. Case studies and hypothetical scenarios are discussed for their social, ethical, and legal implications, as well as analyzed through various ethical-analysis methodologies. The course fosters the development of skills in logical and critical analysis of issues and viewpoints.	IS
	EOC 4631	Marine Pollution	This course introduces students to chemical, physical, and biological aspects of dominant marine pollutants, including dissolved toxic metals, complex organic and inorganic contaminants, and particulate pollutants. Topics cover the sources and types of dominant contaminants, their key characteristics, their pathways (as traced through the marine ecosystem from the source to the sinks), their impact on the environment, as well as approaches that could lead to the reduction or elimination of pollutants in the marine environment.	IS
	ESC 1000	Introductory Earth Science	This course is an introduction to the study of planet Earth, its internal dynamics, and surficial weathering, erosion, sedimentary processes, the composition and motion of its oceans and atmosphere, and its origin as part of the solar system.	IS
	ESC 1000L	Earth Science Laboratory	This course is a laboratory introduction to earth science as the study of planet earth, specifically a study of minerals, rocks, maps, oceans and the atmosphere.	IS
	EVR 1001	Introduction to Environmental Science	This course is an introduction to environmental science that covers the basic functioning of the earth's environmental system and human effects on that <u>system</u> .	S
	EVR 1001L	Introduction to Environmental Science Laboratory	This course is a virtual-reality lab that covers various aspects of environmental science. Students submit lab reports on-line for each module that include data <u>analysis and graphical interpretation</u> .	S

EVR 4922	Environmental Science Capstone	This course allows students an opportunity to apply knowledge from coursework to a number of individual and group projects. There is a strong field component conducted on and off campus using techniques in basic surveying, sampling, and safety.	S
GLY 1000	Dynamic Earth	This course is an introduction to geology as the study of planet Earth, its internal dynamics, and its surficial weathering, erosion, and sedimentary processes.	IS
GLY 1000L	Dynamic Earth Laboratory	Geologic lab work including: glacial processes, Antarctic research, groundwater, etc	IS
GLY 1030	Environmental Issues in Geology	This course examines environmental issues as they relate to geological phenomena, which include volcanic and earthquake hazards, resource and land-use planning, air and water pollution, waste disposal, glaciation and sea-level change, landslides, flooding, shoreline erosion, and global change issues.	S
GLY 1102	Dinosaurs and Disasters on an Evolving Earth	This course examines the history of the earth and its organisms as recorded in the fossil and rock record; principles of geological and paleontological research; evolution of the dinosaurs, mass extinctions, and effects of past continental movements on the diversity of life.	IS
GLY 2010C	Physical Geology	This course is an introduction to surficial and internal processes affecting a dynamic planet Earth. For majors in geology and natural sciences. Two-hour laboratory required.	IS
GLY 2100	Historical Geology	This course examines the history of the earth and is an introduction to the fossil record.	IS
GLY 2100L	Historical Geology Laboratory	This laboratory is a study of the physical and biological evidence for the known history of the earth.	IS
GLY 3039	Energy, Resources and Environment	This course examines the origin of our energy and mineral resources (e.g., fossil fuels, uranium, hydrogen), their global supply, and the environmental impacts of extracting and utilizing these resources. Emphasis is placed on the chemical nature of the resources and the impact on the chemical composition of the ocean/atmosphere and the global heat budget. Field trips, in-class demonstrations, and homework exercises provide firsthand experience. The sources of energy, availability, renewables, and environmental consequences of waste disposal.	S
GLY 3200C	Mineralogy and Crystallography	This course is an introduction to mineralogy, crystal chemistry, and crystallography. Three hour laboratory required.	IS
GLY 3310C	Igneous and Metamorphic Petrology	This course focuses on the classification, description, and origin of igneous and metamorphic rocks; relation of these rocks to tectonic processes.	IS

GLY 3400C	Structural Geology	This course focuses on the theory, processes, mechanics of rock deformation and the deformation of the earth's crust.	IS
GLY 3400C	Structural Geology	This course focuses on the theory, processes, mechanics of rock deformation and the deformation of the earth's crust.	IS
GLY 3610C	Paleontology	This course is a review of invertebrate biology, with emphasis on hard-part nomenclature; the occurrence, distribution, evolution, and ecology of fossil invertebrates.	IS
GLY 4240	Principles of Geochemistry	This course focuses on the crystal chemistry of silicates and other minerals; chemical principles applied to igneous, metamorphic, and sedimentary environments and processes; chemistry of natural aqueous systems; chemical equilibria of geologic systems.	IS
GLY 4451	Introduction to Geophysics	This course explores plate tectonics and earth structure. Current methods of probing the interior: seismology and seismic tomography, geomagnetics, geoid and gravity, geochemistry and geochronology, heat flow, mantle convection, core convection and the geodynamo.	IS
GLY 4544C	Sedimentation and Stratigraphy	This course surveys sedimentary rock types, principles of description and classification, sediment genesis and origin of sedimentary deposits, analysis and synthesis of stratigraphic sequences. Topics include: depositional systems; physical and biostratigraphy; geochronology and chronostratigraphy; magnetic, seismic, and sequence stratigraphy; and tectonic vs. climatic controls.	IS
GLY 4750	Geological Field Methods	This course provides a working knowledge and some experience of techniques, procedures, and tools that are essential to geological field research, the professional geologist, and the required summer field course.	IS
GLY 4790	Environmental Field Course	This course emphasizes the use of field-related observations in the study of environmental problems. Fieldwork includes the study of soils, surface waters and groundwater, erosion and mass wasting, and the chemical contamination of soils and surface waters. Evaluation of student performance in the course is based upon a series of written reports.	IS
GLY 4790	Field Course	This course is a series of field problems based largely on exposures of strata and structures. Preparation of geologic maps, sections, and reports.	IS
GLY 4820	Principles of Hydrology	This course focuses on the fundamentals of hydrogeology with an emphasis on groundwater flow and hydrochemistry. Both theory and applications are add used.	IS

GLY 4884	Environmental Geology I	This course examines the application of geologic and geochemical principles to environmental issues. Topics include: an evaluation of contaminants in surface water and ground water; hydrocarbon geochemistry and petroleum storage tank problems; waste management, including solid, toxic, and nuclear waste; air quality issues including radon and asbestos; geologic hazards in upland and coastal areas; environmental geologic methods and instrumentation; quality assurance and quality control in environmental analysis; principles of toxicology; risk assessment and risk management; and environmental assessments.	IS
IDS 2240	Sustainable Food and Water: Soil, Animals, Vegetables, and Grain	This course provides an overview of the issues involved in food and water security on a planet where a billion people are malnourished, while at the same time another billion are overweight. The course examines the science and sustainability of food production, water quality, and soil development.	S
ISC 2003	Global Change: Its Scientific and Human Dimensions	This course covers global environmental change, scientific and human dimensions, and international public policy implications. The science behind, and impacts from, global climate change.	S
ISC 3523C	Research Methods	In this course, students learn appropriate scientific research methods for several types of research questions. Using the inquiry method of learning, they develop a research question and an experiment to answer it, and then use statistical techniques to analyze their resulting data.	IS
MET 1010	Introduction to the Atmosphere	This course covers the structure of the atmosphere; weather processes and weather systems, including climatic processes.	IS
MET 1010L	Introductory Meteorology Laboratory	This course covers data analysis, instruments, and weather system models.	IS
MET 2101	Physical Climatology	This course covers global distribution of principal climatic elements with emphasis on physical causes. Statistical analysis of distributions of climatological variables.	IS
MET 2507C	Weather Analysis and Forecasting	This course is an introduction to meteorological observations, data, codes, and scalar analysis practices. Weather applications software systems and computing environments for meteorological analysis and weather forecasting techniques are examined.	IS
MET 2700	General Meteorology	This course covers atmospheric structure and composition; weather and circulation systems; physics of atmospheric processes, including thermodynamics of dry and moist air.	IS

MET 3103C	Climate Change Science	This course enables students to explore the science behind our understanding of climate change. The course provides an in-depth exploration of the use of proxy, in situ, remote-sensing data, climate models, and their public policy implications. Students gain experience in evaluating internal and external forcings on the climate system and make quantitative assessments of change. The course also gives students an understanding of energy transfer methods between the atmosphere, cryosphere, oceans, and fresh water systems.	S
MET 3220C	Meteorological Computations	This course covers the solution of meteorological problems using computer and statistical programs; distributions of meteorological variables; meteorological programming.	IS
MET 3300	Introduction to Atmospheric Dynamics	This course will examine a variety of topics, including equations of motion, mass conservation, thermodynamics, vorticity, and geostrophic, gradient and thermal winds.	IS
MET 3520	Current Weather Discussion	This course includes discussion of facsimile analysis and prediction materials.	IS
MET 3940	Weathercasting	This course includes practice in preparing and presenting weathercasts for radio and television.	IS
MET 4159	Selected Topics in Meteorology	This course covers selected topics in meteorology and climatology not covered in other courses.	IS
MET 4301	Atmospheric Dynamics I	This course covers acceleration in rotating curvilinear coordinates; momentum, continuity, and energy equations; geostrophic, gradient, and thermal winds; generalized coordinates; circulation and vorticity theorems; scale analysis; Reynolds stresses; Prandtl and Ekman layers; developing baroclinic systems.	IS
MET 4302	Atmospheric Dynamics II	This course covers linear perturbation theory; sound, gravity, and Rossby waves; numerical weather prediction; baroclinic and barotropic instability; energetics. An introduction to theory of partial differential equations applied to meteorological problems is also presented.	IS
MET 4400C	Meteorological Instrumentation and Observations	This course covers theory and practice of calibration and operation of basic sensors, measurement of temperature, heat flow, fluid flow, pressure, and moisture.	IS
MET 4420	Atmospheric Physics I	This course covers classical equilibrium thermodynamics; first and second law, entropy, phase changes, potentials. Physics of moist air; physics of aerosols; condensation of water vapor on aerosols. Microphysics and dynamics of clouds; growth of ice crystals.	IS
MET 4450	Atmospheric Physics II	This course covers radiative processes in the atmosphere; radiative transfer equation, absorption by gases, Rayleigh scattering. Remote sensing using radars and satellites.	IS

MET 4500C	Synoptic Lecture- Laboratory I: Basic Analysis Techniques	This course covers the analysis of scalar and vector fields, introduction to the three-dimensional structure of atmospheric systems, and thermodynamic diagrams.	IS
MET 4501C	Synoptic Lecture- Laboratory II: Four- Dimensional Structure	This course covers synoptic calculation and four-dimensional analysis of weather systems.	IS
MET 4705	Operational Meteorology	This course introduces observational analysis products used in operational weather forecast offices. Topics include applications of radar and satellite data, the various applications of numerical weather prediction, and types of weather forecasts.	IS
MET 4945	Meteorology Internship	This course is a supervised internship individually assigned to accommodate student's background and objectives.	IS
OCB 4631	Estuarine and Coastal Ecology	This interdisciplinary course addresses the ecology of estuaries and the part of the inshore waters with which estuaries interact directly. The lectures address the general ecological principles that govern the productivity and diversity of estuaries, including their hydrodynamics, sedimentology, chemistry, as well as plant and animal community structure. Key species of estuarine systems are introduced and cycles of carbon and nutrients are explained.	IS
OCB 4637	Marine Benthic Ecology	This course studies the physical setting and ecological organization of the communities found in the rocky intertidal, in the fouling habitat, on sandy beaches, in subtidal soft bottoms, and in the deep sea. This is presented through lectures, substantial reading, and class discussions.	IS
OCC 4002	Basic Chemical Oceanography	This course focuses on the chemical composition of seawater, carbon dioxide system, nutrients, trace elements, and biogeochemistry.	IS
OCC 4060	Environmental Science Modeling	This course gives students an understanding of explanatory and predictive models of the earth's systems and environmental processes therein. Analytical and numerical methods for solving equations are examined and applied. Discussions cover relevant scientific issues, mathematical and computational procedures, visualization techniques, as well as the use of models in research and decision making.	IS
OCE 1001	Elementary Oceanography	This course studies the structure and motion of the ocean and its environs, properties, populations, and energy budget.	IS
OCE 3555	Environmental Science II: Habitable Planet	This course explores the Earth system at and above the surface of the Earth. It combines Earth and biological sciences to explore the co-evolution of the Earth and life over geological time. Evolution of the hydrosphere, atmosphere, and lithosphere are discussed.	IS

OCE 4008	Principles of Oceanography	This course focuses on dynamic motions and life processes in the marine environment. Long-term geologic history of the oceans and recent changes caused by man. An overview of oceanography for upper-division students majoring in science, mathematics, or science teaching.	IS
OCE 4017	Current Issues In Environmental Science	This course is taught at an introductory level and includes discussions of current ground-breaking research, environmental problems, and approaches to solving them. It consists of presentations by experts on their current research topics or environmental issues. Covers topics such as overpopulation, climate, sea level, energy, water resources, food production.	S
OCE 4064	Marine Conservation Biology	The purpose of this course is to understand anthropogenic impacts on the world's marine biological resources and ways to mitigate those impacts. The course will begin with a brief overview of some relevant key concepts in marine biology and ecology, the next portion will focus on anthropogenic activities and how they affect the global ocean and marine biodiversity. The last portion of the class will focus on means of protecting the ocean's life through responsible management.	S
OCE 4265	Coral Reef Ecology	In this course, the student learns the components of warm water coral reef ecosystems, their functions and interactions, and their response to environmental change. The biological, chemical and physical processes that govern the ecology of warm water coral reef ecosystems are addressed as well as the anthropogenic impact on reef ecosystems and the management of coral reef ecosystems.	IS
OCE 4930	Studies in Oceanography	Topics vary.	IS
OCG 3103	The Earth System	This course is an examination of the modern approach to understanding Earth's climate history and climate change on a global scale.	S
OCP 4005	Introduction to Physical Oceanography	This course examines waves, currents, tides, El Nino, and climate change prediction.	S
PEN 1136	Theory and Practice of Compressed-Gas Diving	This course is an introduction to the field of compressed-gas diving, that exposes students to the use of underwater technology and techniques in support of science.	IS
AML 3682	American Multi-Ethnic Literature	This course introduces cross-cultural literary traditions, looking at historical rationales and interconnections among communities as well as vital differences.	IS



English	IFS 2030	Reading, Writing, and Speaking in the Digital Age	This course explores the implications of the digital revolution: what it means for the publishing industry, books, magazines, copyright, libraries, how we read and write, and how we organize ourselves as a society.	IS
	IFS 2122	The Tourist Trap: The Good, the Bad, and the Ugly	This course is designed to help students think critically about cultures with which they are familiar, to learn about cultures with which they are less familiar, and to navigate the complex ways they perceive and participate in and with multiple cultures. Through an exploration of travel writing, journalism, literature, film, and music, students explore, discuss, and respond to in writing questions about the good, the bad, and the ugly of tourism and tourists.	IS
	LIT 3383	Women in Literature	In this course, students study texts that consider women's roles in society. The course focuses on women's gender roles and legal status during the Victorian period. What kinds of political and literary power did women have? What did women have to say about social and political matters? How did women use literary forms to communicate their arguments?	IS
	LIT 4205	Literature of Human Rights	This course is a study of literature in English and related materials relevant to the issue of human rights.	IS
	AMH 2095	American Indians in the United States	This course surveys American-Indian relations with the people and the government of the United States, beginning in the 1760s and continuing to the present. The course examines the Indians' diplomatic and military struggles, as well as to the Indian perspective on familiar historical events such as the Civil War, the New Deal, and the 1960s.	IS
	AMH 2097	Nationality, Race, and Ethnicity in the United States	This course explores the history of immigration to the United States. Topics include the evolution of ethnic cultures and the role of race in adjustment, and related conflicts from colonial times to the present.	IS
	AMH 4231	The United States, 1920-1945: Prosperity, Depression, and World War II	This course offers an overview of U.S. history from 1920 through 1945. Topics include political, economic, diplomatic, military, social, and cultural and intellectual developments during that period.	IS
	AMH 4270	The United States Since 1945	This course focuses on the political and cultural issues faced by the United States during the period of the Cold War (1945 to 1988). Special attention is given to postwar affluence, suburban America, the mass society, the movement from isolationism to interventionism, McCarthyism, the civil rights movement, social conflict in the 1960s, and the rise of postwar conservatism.	IS
	AMH 4530	U.S. Immigration History	This course explores the histories of different immigrant and migrant groups and how they have shaped and been shaped by the United States.	IS

## History

AMH 4630	North American Environmental History	This course introduces the changing relationships between human beings and the natural world in America through time.	S
AMH 4634	Florida Environmental History	This course applies the methods and approaches of environmental history to Florida, considering the changing relationships between human beings and the natural world through time. The field explores how nature has helped to shape culture as well as how humans have modified the natural world and transformed the land.	S
AMH 4684	Women and Children in the Civil Rights Movement	This course examines the role of women and children in the modern day Civil Rights Movement in the United States with the underlying themes of race, class and gender.	IS
HIS 3464	History of Science	This course is a study of the mutually-shaping relationships between social and political ideas and the histories of the various sciences.	S
HIS 4930	Environmental Policy	"Special Topics in History" (3). This course includes specialized approaches to history.	IS
HIS 4935	Sr. Sem.: Environmental Activism	This course is an advanced training in historical methods and historiography. The historical material varies from seminar to seminar depending upon the instructor's area of expertise.	S
HPS 3323	History and Philosophy of Environmental Science		IS
IFS 2026	Environment and Society	This interdisciplinary course in environmental history explores numerous diverse perspectives of the environment: history, ethics, literature, art, and, of course, science. The course asks, "What is the relationship between humans and the natural world?" and explores how nature has helped to shape culture as well as how humans have modified the natural world and transformed the land in the process of extracting resources, building structures, producing pollution, and importing exotic species.	S
IFS 2116	Digital Microhistory Lab	This course brings together microhistory, urban history, and digital history. Students collect comprehensive data about the events in a single city in a single year, through close reading of an English-language daily newspaper published in that city. They gather much of this data using digital methods and then work together to represent those events in a Web site that employs a variety of digital communication tools.	IS
LAH 1093	Latin America: A Cross-Cultural History	This course is a cross-cultural history of Latin America focusing on women, Native Americans, African-Americans, mestizos, and mulattoes in historical context.	IS

	LAH 3456	History of Panama Since 1940	This course covers the history of Panama from 1940 to the present. Emphasizes the impact of WWII, politics, social change, and democracy in Panama.	IS
	LAH 4470	History of the Caribbean	This course focuses on Cuba, Puerto Rico, and other Caribbean societies. European and United States colonialism and local Caribbean forces are studied to help understand the area's social, economic, and political problems and prospects.	IS
	LAH 4748	Social Revolutionary Movements in Latin America	This course is a thematic coverage of the history of social revolutionary movements in Latin America, using specific case studies drawn from, among others, the Mexican, Bolivian, and Cuban revolutions.	IS
	WOH 4235	Disease, Race, and the Environment	This course examines the close relationship between disease, race, and environment in the development of civilizations of the world.	IS
	WST 3015	Introduction to Women's Studies	This course introduces students to the field of Women's Studies. Topics include the construction of gender and gender roles in varying social and cultural contexts. Women's roles are examined from a variety of perspectives, which may include social class, religion, culture, and sexuality. The course includes an overview of theories of feminism	IS
	WST 3251	Women in Western Culture: Images and Realities	This course is an interdisciplinary examination of women's roles in the development of Western culture, focusing on women's contributions to literature, theatre, art, religion, political thought, and science. Concurrently, this course examines what it meant to be female in each era of Western civilization	IS
	WST 4930	Topics in Women's Studies	This course explores specific topics or themes in gender/women's studies based on a feminist approach. A variety of topics from different fields of study are offered from an interdisciplinary perspective.	IS
History/ Philosophy of Science	HPS 3320	Screening the Scientific Life: Cinema and the Cultural Image of Science	This course examines how cinema has provided a unique framework for wrestling with the implications of the modern scientific enterprise, examining how easily scientific rationality can be harnessed to both moral and immoral ends and what kind of world that science has produced. By probing a variety of genres - including biography, documentary, historical drama, science fiction, political satire, and horror - this course observes the cinematic and cultural desire to make sense of science. A critical element of the course is diversity in the Western culture through the lens of race, class, gender, and ethnicity.	IS
	MAP 2480	Biocalculus Computer Lab	This computer laboratory applies calculus methods and mathematical programming software to assist students in solving problems from biology, medicine, and psychology.	IS

Mathematics	MAP 4481	Mathematical Modeling in Biology	This course is an introduction to the use of mathematical models in biology. Linear and nonlinear difference and ordinary differential equations, linear stability analysis, phase plane analysis. Applications may include population biology, infectious diseases, chemical kinetics, and physiology.	S
Modern Languages	IFS 3008	Cinema Gone Global	This course focuses on the aesthetic, technological, economic, and philosophical issues that increasingly connect cinemas across the globe and speak to critical changes in the contemporary world on the basis of various cinema traditions today, negotiating between the global and its "discontents."	IS
	IDS 2456	Who is Human? Culture, Gender and Human Rights	This course examines the assumptions underlying arguments about culture, gender and human rights. In particular, students explore, compare, and evaluate fundamental issues in the philosophy of human rights.	S
	IFS 2047	Philosophy and Film	This course uses movies as a vehicle for discussing philosophical issues, such as, the nature of existence, the problem of knowledge, the existence of God, and the rules for proper conduct.	IS
	PHI 2620	Environmental Ethics	An examination of environmental issues past and present, and how they have made an impact upon contemporary society. Also analyzes the historical development of environmental perspectives and the ethical theories that have been generated by these approaches.	S
	PHI 2630	Ethical Issues and Life Choices	This course draws on ethical theories to explore the major ethical issues that one faces as one makes decisions about the kinds of activities to engage in and the kind of life to lead. Issues such as those involving life and death (e.g., abortion, euthanasia, animal rights) and social justice (e.g. discrimination, responsibility to future generations) are examined.	S
	PHI 2635	Bioethics	This course is an examination of the philosophical foundations of bioethical theory and an exploration of the trenchant issues in contemporary bioethics with a concentration on discussions of race, gender, and vulnerable populations (e.g. the poor, immigrants). The course employs tools of ethical theory, philosophical analysis, and analytic writing to examine a number of moral issues arising in health care including justice in health care, experimentation and research on human subjects, reproductive technology, aging, organ donation, and euthanasia. Throughout the course we examine assumptions about rights, persons, and ethical principles at work in medical decisions.	S

Philosophy

PHI 3670	Ethical Theory	This course studies the nature of morality and moral reasoning through critical analyses of the writings of classical and contemporary ethical theorists directed to answering the questions, "What is good?" and "What ought I to do?".	IS
PHM 2121	Philosophy of Race, Class, and Gender	In this course students study selected contemporary philosophical, literary, and journalistic discussions of questions regarding race, class, and gender with a particular emphasis on the status of these discussions in the United States. Students also survey theoretical accounts of the concepts of race, class, and gender, as well as their interrelatedness, and examine their application to various contemporary social issues.	IS
PHM 2300	Introduction to Political Philosophy	This course introduces students to the main issues in political philosophy: the justification of political authority, role of law, political obligation, neocolonialism, disobedience, revolution, rights, the appropriate ends of government, patterns of distribution and justice.	IS
PHM 3123	Philosophy of Feminism	This course is a comprehensive survey of the most important schools of thought and issues in feminist philosophy, with emphasis on feminist politics and ethics. Liberal, socialist, Marxist, and radical feminism and their differing views about equality and subjection are discussed. Criticisms of now traditional theories from women of color and of "difference" theorists are analyzed. Also considered are problems of particular concern to feminists: the family, sexuality, occupational freedom, harassment, rape, pornography, and domestic violence.	IS
PHM 3351	Philosophy of Human Rights	This course is a survey of philosophical discussions of human rights and the moral and political questions arising from their violations. We examine the philosophical foundations for human rights claims, as well as women's human rights, political evil and mass atrocities. We analyze questions of justice and forgiveness in the context of social healing and democratization.	IS
PHM 3400	Philosophy of Law	This course is a comprehensive survey of the most important schools of thought, traditional problems, and current issues in Anglo-American philosophy of law. Chief theories discussed are natural law, positivism, realism (including the law and economics movement), and critical legal studies (including race and gender theory). Also explored are different views about the interpretation of law and the role of the judiciary in American politics. Includes analysis of legal cases and consideration of issues such as justice, equality, liberty, privacy, and punishment.	IS

PHY 1020	Physics and Technology for Future Presidents	This course is for non-science majors and contains the essential physics students need in order to understand today's core science and technology issues, and to become the next generation of world leaders. The course empowers students possessing any level of scientific background with the tools they need to make informed decisions and to argue their views persuasively <del>with anyone, expert or otherwise.</del>	IS
PHY 1020L	Physics and Technology for Future Presidents Laboratory	This course is designed to accompany the PHY 1020 lecture course.	IS
PHY 1921r	WIMSE Colloquium	This course is a colloquium for the Women in Math, Science and Engineering Living-Learning Community.	S
PHY 2048C	General Physics A	This course is designed to provide students with an understanding of how and why things move. Topics covered include kinematics, forces, energy, <del>momentum, oscillations, and thermodynamics.</del>	IS
PHY 2048L	General Physics Lab	This lab is designed to provide students with an understanding of how and why things move. Topics covered include kinematics, forces, energy, momentum, <del>oscillations, and thermodynamics.</del>	IS
PHY 2049C	General Physics B	This course is a calculus-based introduction to electricity, magnetism, and optics for physical science majors.	IS
PHY 2049L	General Physics B Laboratory	This lab is a calculus-based introduction to electricity, magnetism, and optics for physical science majors.	IS
PHY 2053C	College Physics A	This course is the first semester of a two-semester sequence for life-sciences students and is intended to provide a general knowledge of the basic concepts of physics relating to mechanics, energy, gravity, rotational motion, fluids, heat, thermodynamics, vibrations and waves. Physics is based on problem solving and this class involves both solving word problems and performing laboratory <del>exercises.</del>	IS
PHY 2053L	College Physics A Laboratory	This lab is the first semester of a two-semester sequence for life-sciences students and is intended to provide a general knowledge of the basic concepts of physics relating to mechanics, energy, gravity, rotational motion, fluids, heat, thermodynamics, vibrations and waves. Physics is based on problem solving and this class involves both solving word problems and performing laboratory <del>exercises.</del>	IS
PHY 2054C	College Physics B	This course is an introduction to electromagnetism, light, and modern physics for non-physical science majors.	IS
PHY 2054L	College Physics B Laboratory	This lab is an introduction to electromagnetism, light, and modern physics for non-physical science majors.	IS
PHY 3101	Intermediate Modern Physics	This course focuses on special relativity, quantum properties of light and matter, and origins of the universe.	IS

## Physics

PHY 3221	Mechanics I	This course focuses on Newtonian mechanics of a single particle, oscillations, nonlinear oscillations and chaos, gravitation, central force motion, systems of particles, and motion in noninertial reference frames.	IS
PHY 3802L	Intermediate Laboratory	This course focuses on experiments in optics, modern physics and electricity and magnetism. The emphasis is on the development of experimental technique, assessment of the validity of experimental data, and the development of skill in the written presentation of results.	IS
PHY 4222	Mechanics II	This course focuses on Lagrangian dynamics, Hamiltonian dynamics, dynamics of rigid bodies, coupled oscillations, waves in one-dimensional continuous systems, and special relativity.	IS
PHY 4323	Electricity and Magnetism I	This course focuses on electric fields for static charge distributions, electric fields in matter, magnetic fields for constant current configurations, magnetic fields in matter, and Maxwell's equations.	IS
PHY 4324	Electricity and Magnetism II	This course focuses on electromagnetic wave solutions to Maxwell's equations; reflection, transmission, dispersion, and absorption of electromagnetic waves; scalar and vector potentials; electromagnetic dipole radiation; electrodynamics; and relativity.	IS
PHY 4513	Thermal and Statistical Physics	This course studies the fundamental laws of thermodynamics and their application to simple systems. The kinetic theory of an ideal gas. An introduction to the classical and quantum statistical mechanics of weakly interacting systems.	IS
PHY 4604	Quantum Theory of Matter A	This course focuses on quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter.	IS
PHY 4605	Quantum Theory of Matter B	This course focuses on quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter.	IS
PHY 4822L	Advanced Laboratory	This course consists of experiments in atomic physics, nuclear physics, and other areas of modern physics. Students are expected to work without detailed instructions.	IS
PHZ 3400	Phenomena in Condensed Matter Physics	This course covers topics such as: crystal structures, phonons and thermal properties, electron energy bands, metals, semiconductors, superconductors, and magnetism.	IS
PHZ 4316	Nuclear Astrophysics	This course is an introduction to the role of nuclear reactions and decays in astrophysics. Topics cover the origin of elements in the context of Big Bang, major burning stages in the life of a star, stellar explosions, and processes in interstellar matter.	IS
PHZ 4390	Particle and Nuclear Physics	This course examines the properties of nuclei and particles, nuclear and particle decays, the Standard Model, and accelerator and detector techniques.	IS

	PHZ 4601	Special and General Relativity	This course examines the special theory of relativity, tensor analysis and curvature, general theory of relativity, experimental tests, black holes, gravitational radiation, and cosmology.	IS
	PHZ 4702	Biomedical Physics I	This course is the first in a series of two introductory courses on the applications of physics in biology and medicine. The course discusses applications of classical mechanics, hydrodynamics, and thermodynamics to motion, to the structure of the musculoskeletal, respiratory, and circulatory systems, as well as to the biology of the cell.	IS
	PHZ 4703	Biomedical Physics II	This course is the second in a series of two introductory courses on the applications of electricity, magnetism, optics, and modern physics to the nervous system, to vision, to modern topics in biomolecular research, as well as to microscopy and to modern biomedical imaging techniques.	IS
Psychology	IDS 2651	Language, Body, Mind and World	This course provides an examination of language from biological, psychological, and social perspectives, and considers ways that our knowledge of language can be deployed to tackle real-world issues in areas such as health, law, and education.	S
	SOP 3004	Social Psychology	This course involves scientific study of how people think about, influence, and relate to one another. Subjects include individual, cultural, behavioral, and biological levels of analysis.	IS
Statistics	STA 2171	Statistics For Biology	This course provides an introduction to statistics emphasizing applications to biology. Topics include: descriptive statistics, elementary probability, the binomial and nomial distributions, confidence intervals and hypothesis tests for means and proportions, correlation and regression, contingency tables and goodness-of-fit tests as well as analysis of variance.	IS
	STA 3032	Applied Statistics for Engineers and Scientists	This course covers calculus-based probability, discrete and continuous random variables, joint distributions, sampling distributions, and the central limit theorem. Topics include descriptive statistics, interval estimates and hypothesis tests, ANOVA, correlation, simple and multiple regression, analysis of categorical data, and statistical quality control.	IS
	STA 4173	Fundamentals of Biostatistics	This course introduces students to the statistical methods used to design and analyze studies of the occurrence of disease in human populations.	IS



Business	Management	ENT 2630	The Themed Experience	This course provides a broad overview of the creation and concepts that drive the themed experience. Students discuss historical themed spaces and current industry trends in retail venues, theme parks to formal gardens, installation art and theatrical venues. Students gain understanding of storytelling through <u>designed placemaking</u> .	IS
		IDS 2129	When Culture and Business Collide: Communication in an International Context	In this course, students engage in critical and creative thinking about contemporary problems and solutions in intercultural business communication. Students also grapple with these issues in both an international and domestic <u>context</u> .	S
		IDS 2165	Intercultural Communication, Business, and Sustainability: Writing for 'Green' Everywhere	This course examines the intersections between communication, business, intercultural business, sustainability, social responsibility, ethics, and professional leadership. One facet of the course explores the communication issues and challenges that managers of businesses and other organizations face. Additionally, the course discusses sustainability issues through the lens of Permaculture and Transition Town philosophies, tackling topics such as "peak oil," permaculture design, local and alternative currencies, and the "triple bottom line" ideal; these topics are also examined via a global perspective.	S
		MAN 4701	Business and Society	This course is an examination of current and future issues in business and society with emphasis on the social responsibility of business and future <u>challenges for business in a pluralistic society</u> .	S
	Marketing		Consumer Behavior	This course acquaints the student with the fundamental theories from the behavioral sciences as applied to the consumer decision making process.	IS
	Risk Management & Insurance	BUL 3310	The Legal and Ethical Environment of Business	This course offers an introduction to the legal setting in which business operates. Emphasis is on public and regulatory law and on the social, political, and ethical aspects of legal issues in business. Subjects include the nature of law and legal process, administrative law, business and the Constitution, statutory and common law, and related topics.	S
		RMI 2302	Risk in Business and Society	This course is designed to enhance student understanding of risk and its implications for individuals, business, and society. The course focuses on the impact of uncertainty on decisions and the risk-reward tradeoff. Students analyze the implications of risk in a variety of settings.	S
			ADV 3410	Hispanic Marketing Communication	This course prepares undergraduate students to become educated decision makers and consumers of information regarding U.S. Hispanic marketing <u>communication issues</u> .

Communication & Information

Communication

ADV 4800	Creative Strategy II	This course fosters creative and empathetic skills necessary in communicating via print and electronic media and enables students to utilize these skills in <u>creating integrated advertising campaigns.</u>	IS
COM 3332	New Communication Technology and Contemporary Society	This course relates the development and the use of new communication technologies to a variety of issues, such as social, economic, health, and policy implications.	S
COM 3420	Media, Culture, and the Environment	This course examines the role of language and representation in our understanding of the natural world. The course examines news media coverage of environmental issues, environmental images in popular culture, as well as the communication strategies of environmental organizations.	S
COM 4560	Social Marketing	This course is an overview and application of social marketing principles and campaigns. The course is designed to familiarize students with current theory and knowledge in the field of social marketing and to provide students experience with planning a social marketing campaign.	IS
IFS 2021	Social Responsibility (Rhetorically Speaking)	This course is for students living in the social justice living learning community. It acquaints students with the principles of communication and the role it plays <u>in social justice movements.</u>	IS
IFS 2052	Global Perspectives: Communication	This course introduces students to the basic processes of intercultural communication from a global perspective in hopes of increasing their curiosity <u>and acceptance of other cultures.</u>	IS
MMC 2000	Introduction to the Mass Media	This course covers a historical and social overview of the mass media and their relationship to the mass communication process in a modern society.	IS
MMC 3703	Media, Sports, and Society	This course introduces students to various aspects of the sports-media relationship, including the history of, the industries that constitute, the audiences drawn to, and the social issues that arise from the relationship.	IS
MMC 4203	Media Ethics	This course surveys the ethical principles, standards, and problems in the <u>practice of journalism, advertising, and/or public relations.</u>	IS
MMC 4300	Diffusion of Innovations	This course is an analysis of the process of change, particularly from the standpoint of how communication is used in the introduction, spread, and adoption of new ideas, behaviors, and products within a society.	IS
MMC 4602	Mass Media and Society	This course is an analysis of the effects of mass media on public opinion and behavior. A review of social science research exploring the impact of TV on children and others.	IS

		MMC 4641	Political Economy of Media	This course covers the structure and functions of U.S. and other mass-communication systems as well as their relationship to the political and economic systems.	S
		SPC 4710	Interracial/Intercultural Communication	This course helps students gain knowledge of the theory and process of interracial/intercultural communication.	IS
		SPC 4711	Gender and Communication	This course is designed to help students gain knowledge of the theory and process of gender communication (about and between genders) from an interpersonal context perspective.	IS
		ADV 4800	Creative Strategy II	This course fosters creative and empathetic skills necessary in communicating via print and electronic media and enables students to utilize these skills in creating integrated advertising campaigns.	IS
		COM 3120	Communication for Organizing	This course focuses on communication and group problem solving in bureaucracies.	IS
		COM 4431	Rhetoric of a Global Corporation	This course provides opportunities to observe ways in which religious and musical rhetoric are employed by a major U.S. corporation with a global target market. The course emphasizes observation research that focuses primarily on communication theory and methods.	IS
	Communication Science & Disorders	ASL 2510	Deaf Culture	This course acquaints students with the political, cultural, educational, and social parameters of Deaf Culture. International and United States perspectives are included.	IS
Criminal Justice		CCJ 3673	The Social Reality of Black Males	This course critically examines different viewpoints and non-reconciled positions about the current economic, social and political status of Black males in America. The relationship between stereotypical images and the complicated search among Black males for identity and manhood will also be explored.	IS
		CCJ 4662	Minorities, Crime, and Social Policy	This course examines the involvement of minorities, especially African-Americans, in crime and in the criminal justice system. Special attention is paid to the role of racism in theories of crime and in American law and to the treatment of minorities by the various components of the criminal justice system. May require community service hours.	IS
		CCJ 4663	Women, Crime, and Justice	This course provides a flexible forum for the study and discussion of female crime and delinquency and gender issues in the criminal justice system.	IS
		CJJ 4010	Juvenile Justice	This course provides an examination of juvenile delinquency and juvenile justice, including legal and social history, definition and explanation of delinquency, and assessment of delinquency prevention and correctional programs, with emphasis on application of philosophical, legal, and procedural principles to problems and cases of juvenile justice.	IS

Criminology & Crim	Criminology	CJL 4038	Law, Society, and the Administration of Justice	This course examines how law shapes and is shaped by economic relations, morality, social solidarity, state institutions, political domination, democratic governance, and legal consciousness, and how law impacts and is influenced by race, gender, and class relations. The course explores how social groups use law and legal ideology to press their rights to remedy social inequalities and to what extent these groups are successful. Students become familiar with major theoretical traditions in law and society as well as sociological issues such as civil rights, the legislation of morality, and the administration of justice.	IS	
		CJL 4064	Individual Rights and the Criminal Justice System	This course offers an examination of the full range of rights in criminal justice, dealing with them not only in broad philosophical and social terms but also in terms of specific instances, including the rights of the accused and extending to the rights of convicts, witnesses, victims, probationers, ex-convicts, officials, journalists, and the more generalized rights of participation by interest group advocates, taxpayers, and citizens in criminal justice policy and administration.	IS	
		CJL 4565	Courts and Social Policy	This course examines the role of courts in determining social policy as it relates to criminology. Emphasis is directed toward the political and social inputs that influence judicial decision making and the role of democracy and punishment in the courts. These topics are examined using current social policy. The course satisfies oral competency requirements.	IS	
			HFT 2060	Coffee, Tea and International Culture	This course is an introduction to coffees and teas of the world with a focus upon their importance to global cultures found in many regions. Students learn about these beverages and their unique interrelationship with their regional culture, heritage, and environment. Each beverage focuses upon specific regions of the world.	IS
			HFT 2063	Distilled Spirits and International Culture	This course is an introduction to distilled spirits of the world with a focus upon their importance to global cultures found in many regions. Students learn about these regionally distilled beverages and their interrelationship with their culture, heritage, and environment. The course presents distilled spirits from various regions and countries of the world representing the USA, Canada, South and Central America, Asia, Europe, Africa and the Middle East, among others.	IS

Dedman School of Hospitality	Hospitality Management	HFT 2716	International Travel and Culture	This course introduces students to contemporary tourism through a geographical and multicultural perspective of worldwide travel. The course emphasizes the most popular travel destinations and provides information about the physical and cultural characteristics of major cities, states, and countries. The course offers basic facts about travel destinations, the environment, and the people of many regions around the world, and it presents the nature of cultural diversity reflecting both Western and non-Western cultures with special emphasis on ethnic background, race, religion, values, tradition, language, material goods, and inter-relationships among local	IS
		HFT 2890	International Food and Culture	The course is designed to explore the world's cuisines with a focus on the history of culinary arts, indigenous ingredients, customs, protocol, celebrations, religions, and various cooking methods and terminology.	IS
		HFT 3700	Tourism Management and the Environment	This course focuses on tourism management, organization, and development. Emphasis on economic and environmental issues confronting the industry such as balancing use and preservation.	S
		HFT 4104	Global Impacts and Sustainability in the Club Industry	This course is designed to provide the student with an in-depth understanding and appreciation for sustainable business practices within the private club and golf resort industry. Focus is placed on how existing companies operate within the sustainability model. Students are expected to generate discussions and ideas on how the industry will impact local, regional, and global communities in the future. Case studies are utilized to provide students with real world examples of current practices.	S
		EDF 2082	Introduction to International Development in Education	This course constitutes a basic overview of international development work in the education sector in societies of Asia, Africa, the Middle East and Latin America. The course explores different approaches to international development and how these shape and influence educational improvement initiatives in countries of the Global South	IS
		LDR 2101	Leadership Theory and Practice	This course is designed to inspire, teach, and engage students in the process of learning leadership. The course introduces students to leadership theory and helps them understand their unique role in leadership on campus, in their academic discipline, and within our larger society.	IS
		LDR 2116	Leadership in the Digital Age	This course focuses on addressing leadership in the 21st century in the face of emerging technology, social media communication platforms and global change. The course also introduces leadership online through the lens of positive social change. Using the social change model, students are challenged to take their activity to better their local and global communities.	IS

LDR 2160	Peer Leadership	This course develops potential campus student leaders and improves overall peer leadership efficacy. This course also provides an opportunity for students who are preparing for campus leadership and mentoring roles.	IS
LDR 2162	Leadership in Groups and Communities	This course is designed to inspire, teach, and engage students in the process of learning leadership within the context of working with groups and communities. This course helps students develop the skills necessary in order to be effective in the leadership process and to practice these skills within their community. The course is highly interactive, with student participation and outside class involvement as critical components to the learning process.	IS
LDR 2190	Emotionally Intelligent Leadership	This course is a theory-to-practice course focusing on the role of emotional intelligence (EI) in leadership knowledge, skills, and development. Students are introduced to Emotionally Intelligent Leadership (EIL) theory and consider the role of EI in the context of individual and team leadership development.	IS
LDR 2210	Leadership Through Intergroup Dialogue	This course enables students to explore different aspects of their identities in reference to power and privilege, and how that influences leadership.	IS
LDR 2213	Leadership for Social Justice	This course introduces students to theoretical frameworks in the field of social justice. Through these theories, the notions of privilege, oppression, power and difference are explored. Attention is given to specific social justice issues related to gender, sexual orientation, race, religion, ability, age, and class. Students examine social justice in the context of leadership and come to understand their unique role in creating social change on campus, in their academic discipline, and within our larger society.	IS
LDR 2218	Leadership and Well-being	This course is an interactive, dynamic, theory-to-practice course focusing on learning leadership and well-being theory; acquiring leadership knowledge, skills, and values; attaining personal and community health knowledge, skills, and values; and integrating leadership and wellness values to understand community and civic health concepts.	IS

## Education

## Educational Leadership

LDR 2231	Global Leadership	This course helps students develop the skills necessary to interact globally whether at home or abroad. It leads students to develop a sense of curiosity for diverse cultures and understanding the various behaviors, attitudes, and emotions which are found globally and impact our daily lives. The knowledge gained about global leadership allows students to recognize and respect cultural differences and be able to maneuver situations more accurately as well as gain insight and understanding of recent world leaders.	IS
LDR 2241	Black Male Leadership	This course introduces the study of leadership and leadership efficacy as it relates to Black males, using text and outside readings, activities, and a variety of assignments. Students in this course are introduced to and discuss some of the social, psychological, and cognitive realities of Black males in America.	IS
LDR 2242	Gender and Leadership	This course is an exploration of the intersections of the complex social construct of gender and the intricacies of enacting leadership. This course considers the experiences of women, trans*, genderqueer, and men leaders as well as concepts of gender expression and the intersectionality of identities as influencers on leadership access and practice.	IS
LDR 2243	Latinx Leadership Development	This course is a theory-to-practice, interactive and identity-based leadership course discussing and analyzing components of Latinx Leadership Development. This course explores the historical and cultural aspects of Latinx culture and how it intertwines with leadership development, learning, and practice.	IS
LDR 2290	Leadership & Sustainability in Action	This course is designed to introduce students to the concept of leadership and action related to sustainability. It looks at the interconnectedness and complexity of the three pillars of sustainability (environment, economic, and social) as well as discusses the development of the leadership skills needed to create social change. In conjunction with class discussions and readings, students develop a personal sustainability plan to help align passion and values into active practice.	S
LDR 2325	Leadership and Empowerment	The course includes critical conversation about leadership literature, theory, and class discussions that will provide a foundation for new perspectives of leadership, with the focus on follower empowerment.	IS
LDR 3215	Leadership and Change	This advanced undergraduate leadership course examines the change process and prepares leaders who are effective in working with individuals, groups, and organizations in leading and managing change. This is an interactive theory-to-practice course, focused on leadership as a change process.	IS

	LDR 3263	Leadership Experience	This experiential-based course offers participants an opportunity to put into practice the knowledge, theory, and skills they have learned in previous courses in the Certification program. Students select and create an experience, complete an experiential learning contract for the course, and do extensive reflection on their experience throughout the course.	IS
	LDR 4105	Leadership and Complexity	This final course in the Certificate in Leadership Studies builds upon the leadership literature, theory and experience foundation created in the previous certificate courses. This course provides opportunities for analysis of student's experiential opportunity, advanced theory to practice work, and development of personal leadership theory and integrated learning plan.	IS
Sports Management	SPM 4013	Cross-Cultural Sport	This course approaches sport through a variety of global perspectives and cultural lenses. Students are exposed to different national contexts, histories, leagues, and governing bodies, as well as the social, cultural, political, and economic imperatives organizing sport and its management, including global mega-events (e.g., Olympics, World Cup) and national structures (e.g., Barclay's Premier League).	IS
	SPM 4025	Diversity in Sport	This course examines the role and impact that ethnicity, racism, gender, and other diversity topics have had on sport, while providing students with an opportunity to develop an understanding and appreciation for diversity in sport.	IS
	EDF 1005	Introduction to Education	This course offers students a broad view of education from historical, cultural, psychological, political, social, and philosophical perspectives.	IS
	EDF 2085	Teaching Diverse Populations	This course examines the complexity of the full range of human groupings and cultural perspectives, as well as the complex relationships among them. Students gain self-understanding in becoming culturally conscious participants in the global community through examining the differences between individuals and peoples, comparing cultures within the global community, and investigating diversity within Florida populations in general and school community populations in particular.	IS
	SCE 4891	Introduction to the Nature of Science and Scientific Inquiry for Elementary Teachers	This course is designed for elementary education majors. The course is an introduction to the science process skills, inquiry skills, and a 21st century view of the nature of science within the context of science content.	IS



Teacher Education	SMT 4301	Classroom Interactions (FSU-Teach)	This course explores the role of content, pedagogy, curriculum, and technology in promoting learning and impacting equity. Topics cover discourse in the classroom, diversity, equity, and classroom learning opportunities as well as assessment methods for understanding student learning.	IS
	SMT 4664	Project Based Instruction (FSU-Teach)	This course integrates the major themes in the FSU-Teach program: infusion of technology in representation, analysis, modeling, assessment, and contextualization of the content; field-based experiences; as well as equity in an intellectually challenging culminating experience before students start teaching.	IS
	SSE 4194	Developing a Global Perspective	This course examines theory and practice in global education and the integration of global perspectives into curriculum and pedagogy in social sciences and social studies education. The course also evaluates major issues and controversies embedded in the field, and enables students to critique scholarship, analyze controversies, and propose ideas for integrating global perspectives in curriculum and instruction.	IS
	TSL 4520	Cross-cultural Communication for Foreign/Second Language Teachers	This course provides teacher candidates with information related to cross cultural communication to prepare them to work with linguistically and culturally diverse learners in K-12 settings. Students explore the relationships between language and culture and focus on methods for fostering understanding between different cultural and subcultural groups.	IS
	BME 3009	Introduction to Biomedical Engineering	This course presents an introduction to the field of biomedical engineering, building on previous basic coursework in biological science, physics, and calculus. Topics in cell physiology and modeling, bioinstrumentation, biomaterials, tissue engineering, and bioimaging are covered. The course provides sophomore-level biomedical engineering students with both fundamentals and applications in contemporary biomedical science and engineering.	IS
	BME 4007	Biomedical Engineering	This course introduces the major principles of the life sciences (microbiology, cell biology, and genetics) that are important for biomedical engineering applications. The application of the chemical engineering principles of kinetics, mass transport, bioreactor design, and separation processes to solve the important problems in the biomedical engineering are emphasized.	IS
	ECH 3023	Mass and Energy Balances I	This course covers mass and energy balances related to chemical process systems and measurements, as well as to the development of problem-solving methodologies in mass and energy balances.	IS

Chemical &  
Biomedical

ECH 3024	Mass and Energy Balances II	This course introduces the general concepts of chemical engineering. In this course, the applications of mass and energy balances are extended to include reactive systems, and systems undergoing phase changes as well as transient processes.	IS
ECH 3101	Chemical Engineering Thermodynamics	In this course, students learn the basics of classical and solution thermodynamics. The course forms the link between the mass and energy balance courses, and separations.	IS
ECH 3418	Separation Processes	selection and analysis of techniques for chemical separation	IS
ECH 4743	Bioengineering	This course introduces chemical engineering students to the major principles of life sciences that are important for biotechnological applications, and extends and applies the students' knowledge of the chemical engineering principles of kinetics, mass transfer, separation, purification, and characterization to important problems in bioprocess engineering.	IS
ECH 4781	Chemical Engineering-Environmental	This course is an introduction to applications of environmental engineering from a chemical engineering perspective. Thermodynamics, stoichiometry, chemical kinetics, transport phenomena, and physical chemistry are utilized in addressing pollution control and prevention processes. Analysis of particle phenomena, including aerosols and colloids. Applications of fundamentals to analyze gas and liquid waste treatment processes.	IS
ECH 4824	Chemical Engineering Materials	This course provides an introduction to engineering materials, with emphasis on understanding the relation between structure, processing, and properties. In particular, the role of the atomic structure and arrangement, as well as the microstructure, in determining the physical properties of these materials is examined. In addition, polymers and modern processing techniques for improving material performance are studied. Finally, the resistance of materials to environmental factors, and factors in selection of materials for engineering applications are discussed.	IS
CCE 3101	Construction Materials	This course covers properties and characteristics of construction materials for civil and highway engineering; metals, aggregates, cements, timber, concrete, and asphalt.	IS
CCE 4004	Construction Engineering	This course covers theories, principles, and applications of construction engineering and management. Emphasis is placed on construction preplanning, delivery systems, contracts and bidding, estimation, scheduling, project control, and professional issues.	IS

CEG 2202	Introduction to Geomatics Engineering	This course explores methods and procedures of surface mapping and subsurface sectioning including distance measurements, traverse computations and topographic mapping, and Global Positioning Systems. Use of field equipment and procedures to measure distances, elevations, angles, and <u>perform complete surveys</u> .	IS
CEG 2202L	Introduction to Geomatics Engineering Lab	This course explores methods and procedures of surface mapping and subsurface sectioning including distance measurements, traverse computations and topographic mapping, and Global Positioning Systems. Use of field equipment and procedures to measure distances, elevations, angles, and <u>perform complete surveys</u> . Computer Aided Design (CAD) Laboratory for basic <u>engineering drafting</u> .	IS
CEG 3011	Soil Mechanics	This course covers physical, index, hydraulic, and mechanical properties of soils. Topics include classification, compaction, stress distribution, permeability and seepage, consolidation settlement, and shear strength of soil.	IS
CEG 4701	Environmental Geotechnics	This course covers the geotechnical aspects of waste containment and storage. Aspects of design, construction, and performance of earthen structures for storing or disposing waste of remediation contaminated sites.	IS
CEG 4801	Geotechnical Design	This course covers geotechnical investigation, analysis, and design of different geotechnical structures, including earth retaining structures, slopes and embankments, earthwork with geosynthetics, as well as shallow foundations.	IS
CES 3100	Structural Analysis	This course covers loads, load paths, as well as advanced topics on shear and bending moment, including frames and superposition. Additional topics include influence lines, deflection of determinate structures, as well as indeterminate analysis methods including flexibility, slope-deflection, moment distribution, and stiffness methods.	IS
CES 4605	Steel Design	This course covers the design of tension, compression, and flexural steel members. The course also covers the design of bolted and welded connections <u>for steel members, according to AISC specifications.</u>	IS
CES 4702	Concrete Design	This course covers the design of reinforced concrete structures using current ACI specifications and building codes. Topics include flexural design of reinforced concrete beams, flanged beams, and one-way slabs. The course also presents column design, shear reinforcement design, bond and anchorage, and <u>control of deflections and cracks</u> .	IS

CGN 3508L	Civil Engineering Materials Laboratory	This course is a study of the principal construction materials used in civil engineering practice (soils, concrete, timber, steel, etc.) with special attention to measuring mechanical properties through laboratory testing according to ASTM standards. Hands-on experience in conducting tests, including preparation and instrumentation of test specimens, test execution, data acquisition, and interpretation of test results using statistical analysis.	IS
CGN 4800	Pre-Senior Design and Professional Issues	This course covers issues relevant to the design and construction of engineering projects; professional ethics; project planning and scheduling; design under engineering and societal constraints; importance of licensure and continuing education; as well as oral and written communication issues. Inter- or multidisciplinary teams prepare formal proposals addressing engineering challenges.	IS
CGN 4802	Senior Design Project	This course is a capstone senior-level design course integrating the knowledge and skills gained in undergraduate studies in civil and environmental engineering. The course involves the completion of a team-based interdisciplinary design project covering several sub-disciplines in civil or environmental engineering. Industry and professional participation.	IS
CGN 4930r	Special Topics	This course covers topics in civil and environmental engineering, with an emphasis on recent developments. Topics and credit may vary.	IS
CWR 3200L	Environmental and Hydraulic Engineering Lab	This course is a hands-on introduction to environmental and hydraulic engineering topics. Physical experiments that demonstrate fundamental concepts such as hydrostatics, pipe flow, open channel flow, water quality, and water treatment processes are performed.	IS
CWR 3201	Hydraulics	This course covers fundamental concepts of fluid properties, hydrostatics, kinematics, ideal flow viscous effects, transport phenomena; drag, laminar, and turbulent flow in pipes and channels; and dimensional analysis.	IS
CWR 4101	Engineering Hydrology	This course covers the processes of the hydrologic cycle, hydrologic analyses for the planning and design of water management systems, and the use of application program packages.	IS
CWR 4120	Groundwater Hydrology	This course examines the fundamentals of groundwater flow and contaminant transport. Topics include Darcy's law, flow nets, mass conservation, heterogeneity and anisotropy, storage properties, 3-D equation of groundwater flow, regional circulation, unsaturated flow, recharge, stream-aquifer interaction, well hydraulics, slug test analyses, and contaminant transport processes.	IS

Eng

Civil &  
Environmental

CWR 4202	Hydraulic Engineering I	This course covers principles of hydrology and hydraulics as they apply to the design of water supply, urban drainage, flood control, and hydraulic energy-conversion systems. Students use computer-aided design to devise hydraulics systems.	IS
CWR 4203	Hydraulic Engineering II	This course covers methods for analyzing a broad range of unsteady flow conditions and for designing facilities to cope with resulting problems. Based on these methods, students learn to apply computer programs to practical water distribution and open-channel systems.	IS
CWR 4540	Water Resources Engineering	This course offers a systems approach to complex water resources problems as well as a systems analysis of water resources operations, design, and planning.	IS
CWR 4822	Coastal and Estuarine Hydraulics	This course covers coastal hydraulic principles and waves in estuaries and coastal oceans, wave properties and wave forces on coastal structures, tidal motions, mixing and transport in estuaries, and coastal -engineering analysis.	IS
EES 3040	Introduction to Environmental Engineering	This course is a broad introduction to environmental engineering topics. Includes fundamental concepts in mass balance, water quality, water and wastewater treatment, air quality, and solid/hazardous waste management, with considerations to environmental and societal impacts, as well as technical limitations. This course serves as the foundation for all other environmental engineering courses.	S
EGN 1004L	First Year Engineering Laboratory	This laboratory includes an emphasis on student time management, a variety of products and processes, and computer-aided problem solving. Product/process involves sketching and drawing pertinent diagrams by hand, and learning the history and engineering concepts involved.	IS
EGN 3331	Strength of Materials	This course covers axial, torsional, and flexural stresses and strains, as well as normal and shear stress. Topics include Mohr's circle, transformation of stress, safety factors, and engineering applications.	IS
ENV 4001	Environmental Engineering	This course covers the design of water and wastewater treatment plants, wastewater collection systems, air and water pollution control, as well as solid waste management and contemporary environmental issues.	IS
ENV 4022	Remediation Engineering	This course reviews various innovative remediation technologies used for cleanup of contaminated soil and groundwater at a site such as air sparging, soil vapor extraction, reactive walls, reactive zones, stabilization technologies, as well as hydraulic and pneumatic fracturing pump-and-treat systems.	IS

ENV 4031	Applied Environmental Engineering Microbiology	This course surveys environmentally important microbes and their roles in the environmental restoration processes. Major topics include basics of microbiology, stoichiometry and bacterial energetics; bioremediation and other environmental microbiology applications; as well as detoxification of hazardous chemicals.	IS
ENV 4041	Environmental Systems Analysis	This course covers systems analysis techniques applied to the solution of environmental problems, with particular emphasis on linear and dynamic programming.	IS
ENV 4053	Chemical Fate and Transport in the Environment	This course covers the processes of pollutant transport and transformation in and between air, water, and soil or sediments. Topics include advection, dispersion, diffusion, sorption, degradation, and phase-change processes.	IS
ENV 4341	Solid and Hazardous Waste Engineering	This course covers definitions and characteristics of solid and hazardous wastes. Topics include history, growth, and magnitude of the problem; legislative, regulatory, and technical aspects of waste generation, storage, collection, transportation, processing, transformation, and disposal; design of waste minimization and recycling programs; and case studies of waste management.	IS
ENV 4405	Water Reuse Engineering	This course covers sources of water for reuse, treatment processes and systems, monitoring and control instrumentation, health and social aspects, and design of facilities/systems.	IS
ENV 4417	Applied Environmental Engineering Chemistry	This course covers applications of fundamental principles from general, organic and biological chemistry, to major environmental engineering processes. Emphasis is placed on the chemistry of water treatment.	IS
ENV 4500	Environmental Unit Processes and Operations	This course covers the operational and design features of the physical, chemical, thermal, and biological treatments used in engineering for water and wastewater treatment and the management of solid and hazardous waste.	IS
ENV 4561	Design of Water Quality Management Facilities	This course covers analysis of operations, processes, and systems used in the design of facilities for maintaining water supply quality, wastewater control, and aquatic pollution control. Design of small and decentralized wastewater management systems.	IS
ENV 4611	Environmental Impact Analysis	This course covers topics such as analysis of various measures of environmental quality, impact of human activity on water, land, and air resources, and benefit-cost analysis in environmental-impact assessment.	S

	TTE 3004	Transportation Engineering	This course is an introductory study of transportation engineering in the United States with special emphasis on highway and traffic engineering, planning and design, construction, operation, management, and safety.	IS
	TTE 4201	Traffic Engineering	This course covers nature, characteristics, and theories of traffic problems. Topics include traffic survey procedures, origin-destination studies, as well as an introduction to theory and design of automatic control of traffic systems.	IS
	TTE 4804	Highway Geometric Design	This course covers principles and procedures for the geometric design of highways and streets, consideration of traffic, land use, and aesthetic factors.	IS
Electrical & Computer	EEL 3002L	ECE Engineering Tools Lab	This is an introductory laboratory for students entering the electrical and computer engineering programs. The basic topics include: lab safety issues; solving engineering problems using software tools such as MATLAB and Mathematica; electric circuit simulations using c software packages such as Multisim and OrCad; electric circuit design and instrumentation; the proper use of test and measurement equipment.	IS
Industrial	EIN 4394C	Engineering Materials and Manufacturing Processes II	This course is an introduction to engineering materials used in industry from the perspectives of composition, microstructures, properties, and heat treatment, various traditional and non-traditional manufacturing processes, basic mathematical descriptions for selected processes, and the application of these concepts to process selection and planning.	IS
	EML 3002L	Mechanical Engineering Tools Lab	This course covers computer aided design and drafting, programming, machining, and a basic introduction to the mechanical engineering profession and ethics. Course includes building and testing a simple Stirling engine.	IS
	EML 3100	Thermodynamics	This course discusses the fundamentals of thermodynamics. System description, common properties. Properties of pure substances. Mathematical foundations. First and Second Laws of Thermodynamics, closed and open systems. Equations of state and general thermodynamic relations.	IS
Mechanical	EML 4450	Energy Conversion Systems for Sustainability	This course presents the challenge of changing the global energy system so it addresses reducing dependence on finite fossil energy sources and moving to environmentally sustainable energy sources. The emphasis is on greenhouse gas emissions-free energy production strategies, including renewable energy sources such as solar, wind and biomass. Topics include photovoltaic cells, fuel cells, and thermoelectric systems.	S

		EML 4452	Sustainable Power Generation	This course is a continuation of energy-conversion systems for sustainability and focuses on solar electricity, biopower, biofuels, and hydrogen as energy media. The course also explores whether hydrogen-based transportation is a practical option.	S
		EML 4550	Engineering Design Methods	This is a formal lecture component of the mechanical engineering 'capstone' senior design course project. The course covers the product design cycle from problem identification and need assessment, to specification, concept generation and selection, preliminary design, materials selection, and final design. The design process is placed in context by presenting topics such as legal and ethical issues, product reliability and liability considerations, engineering economics, and optimal design.	IS
Fine Arts	Art Education	ARE 4550C	Art Therapy/Special Populations	This course explores definitions of art therapy, the development of the discipline, the exploration of special populations, human relations, and the <u>related concepts in art education and art therapy.</u>	IS
	Dance	DAN 3144	Cultural Perspectives on Dance	This course surveys approaches to the study of global dance perspectives and practices through emphasis on dance as expression of cultural, historical, social and political forces. Issues of tradition and innovation in select dance phenomena are especially explored through readings, discussion, media presentation, embodied experiences, and movement laboratories.	IS
	Interior Design & Architecture	IND 2219	Design and Human Experience	This course focuses on the impact of design on the human experience. It is a gateway experience in which students will explore the nature of design, creativity, and problem-solving. The course will introduce some of the major theories from the design disciplines of interiors, architecture, landscape architecture, and products design, and provide students with an awareness, understanding, and enthusiasm for design and its impact on our lives.	IS
		IND 3431	Lighting Fundamentals	This course explores the advanced technical aspects of interior design with emphasis on lighting, electrical plans, reflected ceiling plans, measurements, <u>and acoustics.</u>	IS
		IND 4601	Design Process II	In this course, students study texts that consider women's roles in society. The course focuses on women's gender roles and legal status during the Victorian period. What kinds of political and literary power did women have? What did <u>women have to say abo</u>	IS
		IND 3627	Sustainable Design	This course gives students a basic introduction to the fundamentals of sustainable design in order to better understand the inter-relationships between the built environment and nature. Review of Sustainable practices in interior design and architecture with emphasis on LEED	S



		IND 4243	Studio 4 Residential Design	A combination of class lectures, discussions and studio lab sessions intended to provide majors with specialized knowledge and skills for residential design. This will include project research, project programming, creative problem solving, space planning, the selection of interior design products, and advanced visual and oral project presentation.	IS
	Theatre	THE 4064	Disability and Representation	This course offers an introduction that surveys the way in which the arts and popular culture (including literature, fine arts, performance, advertising, documentary film, and video) have both reflected and contributed to attitudes in public policy concerning people with disabilities. The course takes a disability-studies approach, which considers the social and cultural aspects of disability.	IS
		THE 4236	A Cultural History of the American Theatre and Drama from Beginnings to Present	This course examines American theatre and drama in its cultural and social contexts.	IS
		THE 4433	Gender, Race and Performance	This course is an advanced introduction to contemporary theories/practices of performance of race/gender on stage and in everyday life.	IS
Human Sciences	Family & Child Sciences	CHD 4615	Public Policy: Child and Family Issues	This course provides an overview of theory and implementation of public policies relating to children and families at the state and federal levels. Students explore ways that families contribute to and are affected by social problems, and how families can be involved in policy solutions. Students learn about roles professionals can play in building and interacting with family policy.	IS
		FAD 4265	Family Diversity	This course is designed to expose students to the diversity of families by race, ethnicity, social class, and structures in an ego-systemic context.	IS
	Nutrition, Food & Exercise Science	FSS 4135	Institutional Food Economics	This course discusses cost analysis, cost containment, organizational structure, food laws, and food and beverage procurement in health care settings.	IS
		HUN 2125	Food and Society	This course examines the impact of society on human food ways, role of food and nutrition in national development and global politics.	S

Jim Moran School of Entrepreneurship	Entrepreneurship	ENT 2802	Entrepreneurship and Contemporary Society	This course explores entrepreneurship in society by understanding how innovation can lead to commerce and how commerce impacts our daily lives. Topics include the process of innovation, the nature of entrepreneurialism, the essence of Problem-Opportunity-Venture-Operations (POVO) model, the lean start-up business model, different kinds of entrepreneurship (commercial, social, scientific and artistic) and an introduction to competencies that have facilitated success in other entrepreneurs.	S
		ENT 3283	Women and Minorities in New Ventures	This course focuses on the emergence and current impact of women- and minority-owned businesses. The course also considers special challenges and opportunities that women and minority entrepreneurs confront. Course may include discussions with successful women and minority business owners.	S
	Retail Entrepreneurship	CTE 3808	Consumers in a Complex Marketplace	This course explores the decision making behavior of consumers in a complex and diverse marketplace, including consumer rights and responsibilities.	IS
		CTE 4829	Global Sourcing	This course covers global trade, trade practice and theories, as well as the <u>global sourcing related to the textile, apparel, and retail industries.</u>	S
	Social Entrepreneurship	ENT 3503	Social Entrepreneurship	Creating new ventures based on social issues in business	S
Medicine	Interdisciplinary Health Science	ISS 4304	Contemporary Social Problems	This course is designed to introduce the benefits and methods of interdisciplinary research and study. This course uses multiple and interrelated perspectives to identify and explore social issues and problems. Students are guided through the process of building interdisciplinary perspectives to maximize cognitive skills, critical thinking and problem solving skills.	IS
Music		IFS 2059	Music and International Human Rights	This course investigates the role music plays worldwide in negotiating, consolidating, and questioning power between powerful macro-reaching political entities (corporations, nation states) and micro-locales ( <u>villages, regions, sub-cultures</u> ).	IS
		MUE 4044	Music Education in the American Society	This course analyzes the interaction of society, culture, and musical behavior with the activities, attitudes, and behaviors in the United States' school <u>systems.</u>	IS
		MUH 2019	Modern Popular Music	This course surveys the development of popular music in America from the early 20th century to the present with a focus on the cultural, social, economic, technological, and political conditions surrounding that music. The course widens student's comprehension of the times, places, cultural contexts, intellectual debates, and economic conditions that foster (or hinder) artistic <u>innovation.</u>	S

N		MUH 2051	Music in World Cultures	This course provides an introductory survey of various musical traditions in a global perspective, exploring music both as a phenomenon of sound and as a phenomenon of culture. Students analyze tradition as a constantly evolving and transformative entity that nurtures and sustains core cultural values. The social context of music, including social structure, geography, globalization, mass mediation, concepts of religion, instruments, aesthetic priorities, and cultural beliefs that inform music within given cultural contexts is emphasized.	S
		MUH 3053	American Roots Music	This course studies the diverse music of North American minority groups, with an emphasis on Native American, African-American, Latin American, Asian, Jewish, and certain Euro-American traditions.	IS
		NSP 3185	Multicultural Factors and Health	This course is a comparative analytical approach to the study of communication, current problems, issues, health care beliefs, values, and practices of different systems and cultural norms as they affect health care practices which conflict with ethnic or cultural communication related to standards and value systems.	IS
		NSP 3685	Grief, Loss and Trauma: Ethnic and Individual Variations	This course explores similarities and differences among cultures when responding to grief and loss. Topics related to diverse populations and grief practices are examined, as well as personal response to grief, loss, and trauma; not exclusively utilizing death as the only example of loss or trauma. The course allows students to expand their reactions to life and death, plan their own funeral, and at the same time focus on family, community, and worldwide populations.	IS
		NUR 3065	Health Assessment, Wellness and Prevention Across the Lifespan	This course introduces the nursing student to concepts and models of wellness and health promotion for individuals, families, and communities. Included are communication and interview techniques in compiling a health history, technical skills in performing a physical exam, clinical reasoning skills in doing a health risk appraisal, formulating nursing diagnoses appropriate to identified problems, and understanding the role of the nurse in patient education. Client's cultural differences, development stage, family structure, economic situation, and health behaviors are considered when evaluating health status. In addition, the role of the nurse in patient education is emphasized.	IS

Nursing

NUR 3065L	Health Assessment, Wellness and Prevention Across the Lifespan Lab	This course provides the application component of NUR 3056. Under the guidance of lab instructors, the student is given opportunities to integrate theoretical knowledge from NUR 3056 in practice sessions using demonstration; low, medium, and high fidelity simulation scenarios; deliberate practice; debriefing; and reflective instructional approaches.	IS
NUR 3177	Holistic and Complementary Approaches to Health and Healing	This course is designed to explore knowledge of practices that promote health and well-being. Emphasis is on stress management and body-mind-spirit communication. A variety of holistic and complementary approaches to health and healing are explored.	IS
NUR 3678	Nursing Care of Vulnerable Populations	This course examines the application of nursing and related theories to the care of vulnerable populations throughout the life cycle. Emphasis is placed on nursing care of the elderly, clients with psychosocial disorders, and at-risk culturally diverse populations in the community. The impact of poverty, environment, support networks, health policy, and community resources on vulnerable populations and health outcomes is explored. The focus is on promoting client independence and maximizing quality of life of vulnerable individuals, families and communities.	S
NUR 3678L	Nursing Care of Vulnerable Populations Lab	This course provides the application component of NUR 3678. Under the guidance of clinical instructors, the student is given opportunities to integrate theoretical knowledge from NUR 3678 in clinical sessions. Emphasis is placed on nursing care of the elderly, clients with psychosocial disorders, and at risk culturally diverse populations in the community. The impact of poverty, environment, support networks, health policy, and community resources on vulnerable populations and health outcomes is explored. The focus is on promoting client's independence and maximizing quality of life of vulnerable individuals, families, and communities.	S
NUR 4667	Population Health in Nursing	This course introduces students to global health, the U.S. healthcare system, the social determinants of health, environmental health, emerging infectious disease, disaster planning and population support during disasters, and other mass casualty situations. In addition, using Healthy People/WHO indicators in evidence based decision making and utilizing the process of community assessment including the tools of epidemiology and biostatistics are reinforced.	S

Administration & Policy	Public Administration	PAD 3003	Public Administration in American Society	This introductory course in public administration studies the management of large-scale government bureaucracies including organization, career systems, and financing. It also focuses on the role of bureaucracies in modern society in the formulation and implementation of public policy.	S
		PAD 3013	Futures Studies	This course applies futures studies perspectives and methods to the study of societal trends and conditions. Emphasis is on the development of anticipatory public policy.	IS
		PAD 3931	Selected Topics in Public Administration	Topics may vary.	IS
		PAD 3941	Public Service Internship	This course consists of participant observation of the administration of policy in public service organizations. Internship with faculty supervision, on-campus seminars, discussion papers. May be repeated to a maximum of six semester hours.	IS
		PAD 4074	Professional Pathways in Emergency Management	This course explores best practices and theories regarding emotional intelligence, communication, behavior and ethics in professional emergency management. Students gain the knowledge and skills necessary to be successful in a professional emergency management setting.	IS
		PAD 4083	Terrorism and Security in Africa	This course provides an in depth look at the nature and evolution of terrorism in Africa. Topics covered will include recruitment, anti-terrorism agencies/initiatives, the ramifications of colonialism on modern day terrorism, the state of security on the continent, gender roles in terrorism, and state sponsored terrorism.	IS
		PAD 4170	Nongovernmental Organizations in Development	This survey course is about international development NGOs. The course presents contemporary perspectives about NGOs, describes how NGOs operate, and introduces the challenges that their managers face and potential solutions for them.	IS
		PAD 4301	Disaster Management Planning for Urban Poor Communities	This course discusses the elements that intensify risk where informal and non-permanent settlement housing is prevalent. Government interventions, especially those involving urban planning and policy are studied and their repercussions to the social, economic and cultural networks of these communities analyzed.	S
		PAD 4380	Disasters: From Shock to Recovery	This course utilizes multiple case studies to examine the complexity of disaster situations in the United States and internationally. The course covers a different disaster case study every week, focusing on event-specific conditions that created/contributed to the disaster, local preparedness, response and recovery in the aftermath of the event.	S

## Public Admi

PAD 4382	Disaster Recovery and Mitigation	This course is designed to provide an overview of recovery and mitigation activities in the post-disaster environment. Focusing on the "Recovery Phase" initially, course materials examine the policy and planning mechanisms involved in short and long term rehabilitation of distressed communities. A similar examination from the "Mitigation Phase" is also made.	IS
PAD 4414	American Public Service	This course studies the structure and political role of the civil service, evolution of government employment, current personnel policies, rights and responsibilities of public servants, and labor management relations. The impact of the public service on American society is explored.	IS
PAD 4833	International and Comparative Disaster Management	This course discusses practical and theoretical issues associated with international disaster management. Risk, hazards, and disasters are addressed from a global perspective with particular emphasis placed on the differences in key issues between developing and developed countries.	S
PAD 4844	Public Health and Emergency Management	This course is designed to provide an overview of international public health events that have either evolved into disasters, or are born of disasters. In addition, this course looks at preventing and preparing for public health disasters. A variety of threats and case studies are reviewed with an evaluation of future threats. Additionally, epidemiology and the discovery and reporting of events are reviewed.	S
PAD 4891	Non-Profits, NGO's and Disaster	This course is designed to introduce students to the fundamental concepts, theories, principles, and practices in emergency management relationships with NGO's and non-profit organizations.	S
PAD 4897	Global Security and Fusion	This course examines how the nations of the world unite for a common cause, outlining geo-political and strategic relationships that serve to streamline and facilitate such relationships, the critical importance of U.S. security and intelligence cooperation with our partners and allies, and how our military supports our civilian authorities in a variety of ways toward this end.	IS
PAD 4936	Business Continuity Private Sector	This course examines the fundamental and unique features of private sector emergency management and business continuity planning. It covers important areas such as risk evaluation, business impact analysis, training, plan maintenance, and the role of business sector recovery in community recovery.	IS

African-American Studies	AFA 1003	Diversity and Justice	This course integrates African authors, pre- and post-Apartheid, to demonstrate the problems of living in a diverse world. It fosters awareness and acceptance of people different from students through the study of the African-American culture, and stimulates an appreciation and respect for people of all cultures.	IS
	AFA 1003	Diversity and Justice	This course integrates African authors, pre- and post-Apartheid, to demonstrate the problems of living in a diverse world. It fosters awareness and acceptance of people different from students through the study of the African-American culture, and stimulates an appreciation and respect for people of all cultures.	IS
	AFA 2000	Introduction to the African-American Experience	This course is an interdisciplinary examination of African-American culture and socio-economic status. This course also explores elements of the African Diaspora.	IS
	AFA 3101	Theory and Dynamics of Racism and Oppression	This course engages theories of race discrimination and oppression as it relates to African Americans. Students systematically and objectively examine the sources of American oppression and explore how it shapes the life chances of African Americans from prior to the Reconstruction Era to the twenty-first century. The course explores the timing and manner of their entry into U.S. society, conflicts with other groups, encounters with prejudice and discrimination, as well as the extent to which they have secured access to cultural, economic, political, and social assimilation into U.S. society.	IS
	ECO 2013	Principles of Macroeconomics	This course explores aggregate economics and national income determination, money and monetary theory, present macroeconomic conditions, and aggregative policy alternatives; theory of international trade and the balance of payments; economic growth and development.	IS
	ECO 2023	Principles of Microeconomics	This course covers consumption, production, and resource allocations considered from a private and social point of view; microeconomic problems and policy alternatives; economics of inequality and poverty; and comparative economic systems.	IS
	ECO 3004	Debating Economic Issues	This course applies economic analysis to current economic policy issues. Topics may include financial markets, Social Security, debt finance, health care, immigration, global climate change and environmental policy, regulation, welfare reform, labor market discrimination, drug policy, and topics selected by students.	S
	ECO 3130	Free to Choose	This course, dealing with liberty and economic freedom, addresses many present and past social issues and public policy decisions.	IS

ECO 3131	Market Ethics	This course examines the vices, virtues, and values of capitalism to evaluate its ethical properties. It is designed to raise questions and clearly-structured issues so that the student can make informed and thoughtful decisions.	IS
ECO 3933	Special Topics in Economics	This course explores special topics of current interest or of benefit from specialties of visiting faculty.	IS
ECO 4400	Games and Decisions	This course is a non-technical introduction to strategic decision-making. Focus on situations involving conflict and cooperation and on decision-making under conditions of uncertainty and ignorance. Applies game theory and decision theory to such topics as bargaining and negotiations, contracting, auctions, and voting	IS
ECP 3113	Economics of Population	This course examines determinants and consequences of world population growth and changes, components of population growth in more- and less-developed countries, population and food supply, nonrenewable resource interrelationships.	S
ECP 3143	Afro-Americans in the American Political Economy	This course examines the market, institutional, governmental, and social processes that have contributed to the economic well-being of African-Americans. Also covers theoretical material related to wage determination, labor market discrimination, and marriage and transitions in family structure, as well as interaction between race and class as determinants of the life chances of African-Americans	IS
ECP 3302	Economics of Natural Resources, Energy, and the Environment	This course focuses on the relationship between natural resource availability and growth, capital theory, economics of the environment, the U.S. energy problem and alternatives for the future, an economic appraisal of U.S. energy policy.	S
ECP 3403	Business Organization and Market Structure	This course is an introduction to the economic analysis of industry, a survey of market structures, oligopoly and collusion, a variety of commercial practices under imperfect competition, the welfare consequences and policy approaches to the problems of monopoly.	IS
ECP 3617	Land Use, Housing and Government Regulation	This course provides the theoretical and institutional machinery for analyzing land, housing and mortgage markets, with special attention given to the intended and unintended effects of government regulation of these markets. Important empirical evidence is also reviewed.	S



## Economics

ECP 4312	The Economics of Energy, the Environment, and Sustainability	This course explores the idea that in addressing public policy issues involving sustainability of the environment and energy systems, engineering is important for obvious reasons, but without consideration of the human factor, engineering solutions will be incomplete. In the course, students are educated on economic models and analysis of sustainability in energy and environmental systems. The frontier of addressing public policy issues involving the sustainability of the environment and energy systems requires a combination of both engineering and social science skills. Engineering is important for obvious reasons; however, without consideration of the human factor, engineering solutions alone will be incomplete at best and failures at worst.	S
ECP 4530	Economics of Health	This course provides an overview of the U.S. health care system and the role that economics plays in advancing our understanding of it. Topics included are the demand for medical care and health insurance, the role and impact of government in funding health care services (Medicare and Medicaid), cost benefit analysis, pharmaceuticals and the FDA, organ donation and vending, as well as health care and insurance in other developed countries. Throughout the course, students have opportunities to improve their writing through instruction and assigned papers.	S
ECP 4613	Urban Economics	This course is an analysis of trends in urban economies in the U.S. and elsewhere. Introduction to economic and demographic data sources for analysis of urban areas; issues confronting contemporary urban places.	S
ECP 4618	Research Methods for Studying Housing, Land and Cities	This course explores the use of quantitative research methods to evaluate and understand the performance of economies, with a focus on land use, housing, urban economic growth, housing finance and public finance. Each student will be responsible for identifying a research topic, defining the research question, and conducting original research as part of the course through a workshop format supervised by the instructor.	S
ECS 3022	Social Entrepreneurship and Economic Development	This seminar incorporates the practical realities of economic development program implementation into the classroom, using a discussion format and case studies of real world applications. The readings are used to provide a broader context for the discussion of specific cases and more general theories. An emphasis is placed on "lessons learned" and discussion of the constraints and potential for implementing effective economic development programs in low-income areas of the United States and world, with a special focus on cities.	S

ECS 4013	Economics of Development	This course presents economic development as a process, description and analysis; alternative overall theories of development; particular problems and policy responses to them; strategic choices in development policy. Main focus on third world economies.	S
ECS 4431	Economics of the Caribbean	This course provides a detailed introduction to the analysis of economic development of Caribbean countries, including a discussion of the basic characteristics of Caribbean economies, a discussion of alternative theories and models of development, as well as a range of particular economic and social issues of concern to policy makers within Caribbean countries. Focus is on the actions available to Caribbean nations for addressing their development concerns within their region and/or country.	IS
EVR 4314	Energy and Society	This course explores the demand and efficient use of energy from fossil fuels and alternate renewable sources, and how energy impacts urban and environmental sustainability.	S
GEO 1000	World Geography	This course is a regional survey of the human occupation of the face of the earth, local cultures, political systems, and development problems.	S
GEO 2210	United States and Canada	This course examines the physical diversity and the cultural and political patterns of North America.	IS
GEO 2270	Florida	This course focuses on the physical, social, and economic geography of the state, including growth and environmental issues.	S
GEO 4213	U.S. National Parks	This course reviews the history, social, and environmental significance of America's national parks.	IS
GEO 1330	Introduction to Environmental Sciences/Studies	This course explores the causes of local and global environmental problems and their impacts, including resource use, pollution, ecosystems, and population growth. This course introduces students to some of the most pressing environmental issues of our time. Understanding complex environmental problems and potential solutions requires multiple disciplinary perspectives. We will examine issues from scientific, social, economic and political perspectives.	S
GEO 1330	Environmental Science	This course explores the causes of local and global environmental problems and their impacts, including resource use, pollution, ecosystems, and population growth.	S
GEO 1400	Human Geography	This course is an introductory survey of world cultures, population problems, global economic restructuring, international development, and political interdependence.	S
GEO 2200C	Physical Geography	This course is an overview of earth-sun relations, weather, climate, landforms, water systems, soils, and vegetation.	IS

GEO 3502	Economic Geography	This course examines the geography of economic activity at local, national, and global scales: historical development of capitalism, regional development, spatial structure of agriculture, manufacturing and services, the global economy, third world poverty, and population growth.	S
GEO 4114	Environmental Field Methods	This course focuses on the design and implementation of a field-based project employing field sampling, GIS, GPS, and exploratory statistical methods.	IS
GEO 4162C	Spatial Data Analysis	This course is an introduction to the quantitative analysis of geographic data that explores clustering, spatial patterns, and intrinsic relationships between <u>geographic variables</u> .	IS
GEO 4210	Landforms and Landscapes	This course is on the spatial distribution of geomorphic landforms across landscapes: how they form, how they change over time, how they are designated, and their nomenclature. Emphasis is given to how humans interact with these landscapes and how these landscapes can impact human habitation.	S
GEO 4251	Geography of Climate Change and Storms	This course explores the critical debate on global climatic fluctuations and extreme weather frequency in relation to human impact and interference. Particular focus is given to geographic variations and temporal validity.	S
GEO 4300	Biogeography	This course examines the spatial distributions of flora and fauna, ecosystem change, and human interventions such as logging, invasive species, and <u>wilderness preservation</u> .	IS
GEO 4340	Living in a Hazardous Environment	This course explores types of environmental hazards (natural and human-made) and their effects, techniques for the analysis of risks, and strategies for <u>recovering losses</u> .	S
GEO 4355	Geography: Food and Environment	This course explores food production, distribution and consumption by intensive global agro-food and local organic farm operations, and their impacts <u>on environmental sustainability</u> .	S
GEO 4357	Environmental Conflict and Economic Development	This course examines controversies over the use, transformation, and destruction of nature, including political ecology.	S
GEO 4376	Landscape Ecology	This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interactions and implications. Familiarity with software packages such as ArcGIS is assumed.	IS

Geography

GEO 4376	Landscape Ecology	This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interactions and implications.	S
GEO 4403	Global Change, Local Places	This course examines four aspects of global change—economic, environmental, cultural, and political—with a focus on how globalization is impacting individual countries and how places are responding to globalization’s challenges.	S
GEO 4412	Environment and Gender	In this course, students look at how physical space (be it national boundaries or public parks) and the terrain of the symbolic realm are sometimes at odds. Included in this investigation is the examination of how ideas of gender, place and space affect individuals’ experiences and how said experiences are created and limited by ideas of space at various geographical scales and contrasts between more and less economically developed nations.	S
GEO 4421	Cultural Geography	This course studies the processes by which various cultural features have diffused throughout the world. Emphasis is on the contemporary cultural landscape.	S
GEO 4450	Medical Geography	This course applies geographical concepts and techniques to health-related problems, including the ecology of health, disease diffusion, medical cartography, and health care access.	S
GEO 4471	Political Geography	This course focuses on the spatial dimensions of political processes from the local to the global level, including elections and geopolitics of the world system.	IS
GEO 4503	Globalization	This course explores the concepts and processes that define a world system of commodity production, labor costs, and cultural exchange.	S
GEO 4602	Urban Geography	This course explores the historical growth of cities; spatial structure of commercial, industrial, and public facilities within cities; residential segregation; urban poverty and fiscal distress, and urbanization in the third world.	S
GEO 4700	Transport Geography	This course offers a review of the literature and techniques for the spatial impacts of transportation systems, including functionality, and their role on society, the economy, energy, the environment, and sustainability.	S
GEO 4930	Special Topics in Geography	Topics vary.	IS
GIS 3015	Map Analysis	This course investigates and demonstrates the 'power' of maps and spatial thinking for representing the world. The course investigates territorial and mental communication of places and their patterns through scale, generalization and symbols.	IS

GIS 4035	Introduction to Remote Sensing	This course covers remote sensing foundations and the use of remote sensing for environmental and cultural applications. Focus is on the foundations of remote sensing, aerial photography and photogrammetry, characteristics of various sensing systems, remote sensing applications, and an introduction to digital image processing.	S
GIS 4035L	Introduction to Remote Sensing Lab	This lab provides practice with the concepts and techniques in remote sensing. Specifically, the lab covers the foundations of remote sensing, aerial photography and photogrammetry, characteristics of various sensing systems, remote sensing applications, and basic skills in digital image processing.	S
GIS 4043	Geographic Information Systems	This course is a survey of GIS topics, including locational control, spatial data structures, modeling and analysis, and future trends in decision support, sensors, and geographic methods.	IS
GIS 4043L	GIS Lab	This course is a survey of GIS topics, including locational control, spatial data structures, modeling and analysis, and future trends in decision support, sensors, and geographic methods.	IS
IDS 2227	Sustainable Society	This course provides students with the opportunity to observe and inquire about sustainable practices through field studies at local organic farm, hydro-power station, new urbanism community, and recycling facilities, etc., as well as through interactions with community-based programs. Students engage in critical thinking about the sustainability of human society and the environment from various aspects, which include producers, consumers, public-service sectors, and policy makers.	S
IDS 2471	Glaciers, Geysers, and Glades: Exploring U.S. National Parks	This course explores the sustainability of the National Parks of the United States; their geographic distribution, physical structure, economic management, and cultural recreation.	S
IFS 2070	Thinking Beyond Ourselves: Global Perspectives	This course is designed to introduce the students to the basic concepts, theories, functions and behaviors associated with intercultural communication. Throughout the course students increase in knowledge, understanding and awareness of different cultures and countries, interpret cultural values and communication strategies used across cultures/countries, and become more effective in engaging in the 21st-century globalized world.	IS
IFS 2089	Global Engagement	This course gives students the opportunity to study a different country's unique customs, values, and traditions and compare it with their own through actively participating in cultural experiences.	IS

Socia

International Affairs	INS 2912	Developing Global Citizens: Global Issues in Theory and Practice	This course is the final required class for the Global Citizenship Certificate. The course increases students' global competencies by utilizing theories and concepts learned during the Global Perspectives course and applies those to higher-level critical thinking and research. The course explore topics relevant to today's global society such as extreme poverty and inequality, international trade, political cooperation, climate change, race, and ethnicity and gender.	S
	INS 3003	Introduction to International Affairs	This course introduces students to the core questions and concerns of international affairs. The course surveys the many distinct academic disciplines that together contribute to the development of an interdisciplinary understanding of the international system. The course also examines how each of these disciplines understands the international system, the questions it raises, and its strengths and weaknesses. In addition, the course provides an introduction to many of the global issues of interest to international affairs majors, including terrorism, democracy, and globalization. At the end of this course, students have the skills and knowledge required to construct their own specialized plan of study in international affairs.	IS
	CPO 2002	Introduction to Comparative Government and Politics	This course addresses government institutions and current political parties throughout the world, as well as theories that explain similarities and differences among countries. Topics may include electoral systems, parliamentary systems, causes of political change, democratization, political culture, ideologies, and economic and social policy. Examples are drawn from Western democracies and developing countries.	IS
	CPO 3101	European Union	This course covers the historical development, political institutions, and philosophical underpinnings of the European Union. Topics include federalism, different notions of sovereignty, contemporary decision-making in the EU, assessments of democratic institutions in Europe, and prominent points of debate, such as monetary union, trade policies, environmental policies, and enlargement policies.	IS
	CPO 3743	States and Markets	This course analyzes the multifaceted ways in which political and economic spheres interrelate. Students will be exposed to relevant debates on democracy and growth, the state's role in the economy, corruption, natural resources, and redistribution.	S
	CPO 4057	Political Violence	This course introduces students to scholarly writing on violent political conflict. Reviews theories of guerilla struggle and counter-insurgency, as well as the philosophy of non-violent direct action and several theories of conflict resolution. Course also explores the human costs of political violence.	IS

## Political Science

CPO 4504	Institutional Approaches to Democracies and Dictatorships	This course examines questions about democracy and dictatorship from an institutional perspective. What is democracy and how is it measured, and how does regime affect the welfare of citizens? An emphasis is on the variety of institutional arrangements found in dictatorships.	IS
INR 3502	International Organization	This course covers the role of global and regional international organizations in contemporary world politics. Special emphasis is placed on the United Nations system, including its structure, activities, influence, and role in world <u>integration</u> .	IS
INR 4011	Political Responses to Economic Globalization	This course examines economic globalization: what it is, who is harmed and helped by it, how countries and citizens respond to it, and what the future might hold. The course focuses heavily on economic issues but assumes no <u>background in the subject</u> .	S
INR 4075	International Human Rights	This course introduces the student to the philosophical and legal foundations of the international human rights regime, and explores the development of norms and institutions with special emphasis on the post-World War II era.	IS
INR 4078	Confronting Human Rights Violations	This course investigates various means of confronting massive human rights violations. It compares the recent phenomenon of truth commissions and pardons to the more traditional, legalistic approach of criminal prosecution. Moral issues involved in each approach and how each serves society are explored. Specific truth commission cases are studied.	IS
INR 4702	Political Economy of International Relations	This course examines the interaction between politics and economics in international relations. Topics covered include international trade, the global monetary system, multinational corporations, regional integration, and <u>economic development</u> .	S
POS 3122	State Politics	This course focuses on government and politics in the American states. It looks at the governor, the legislature, and the courts; the history of federalism; and policies, practices, and social institutions that affect state government. Includes a study of state policies in such areas as welfare, education, crime, and the <u>environment</u> .	S
POS 3691	Law and Society	This course surveys the American legal system including the role of lawyers; sources and types of law; and courts, legislatures, executive agencies, and other law-making institutions. Also links law and legal behavior to the social, economic, and political features of modern society.	S

POS 4070	Race, Ethnicity, and Politics	This course examines how race and ethnicity are interwoven in American politics by viewing the role of African-American, Latino, and Asian-American voters, candidates, and public officials, and looking at the political attitudes of these groups.	IS
POS 4206	Political Psychology	This course examines the psychological origins of citizens' political beliefs and actions, while providing an overview of the theories and methods used in the field of political psychology. Topics cover information processing, emotion, attribution, tolerance, stereotyping, prejudice, and political communication.	IS
POS 4624	The Supreme Court, Civil Liberties, and Civil Rights	This course reviews recent interpretations of the Bill of Rights and 14th Amendment case law with special attention to freedom of expression, equal protection, and criminal due process rights.	IS
POS 4715	Politics and the Theory of Games	This course discusses elementary theories of individual and group decision-making which are used to analyze various political phenomena such as the arms race, legislative politics, majority rule in democracies, voting and elections, and coalition governments.	IS
PUP 3002	Introduction to Public Policy	This course is an introduction to the development of public policy in the United States. Covers main policy areas including housing, education, the economy, homeland security, etc.	S
PUP 4203	Environmental Politics and Policy	This course focuses on the actions taken by government to protect and improve environmental quality in the United States. It includes such topics as the underlying scientific principles, the major actors in policy making, existing legislation, and future challenges.	S
PUP 4931r	Special Topics in Public Policy	Policy alternatives and the policy-making process on a specific contemporary policy question in America, e.g., science research and development, energy, regulation, taxes, environment. Varies with the instructor and semester.	IS
IFS 2004	The Hunger Games Trilogy: Collective Action and Social Movements	This course is an introduction to the sociological study of collective behavior and social movements. This course is organized to highlight themes in The Hunger Games series by Suzanne Collins, which students analyze during the semester. Students have an opportunity to research a movement of their choosing during the semester.	IS
IFS 3137	Politics of Reproduction	This course is an introduction to studying the social and political dimensions of human reproduction. In each class, students address historical context, sociopolitical trends, and contemporary debates regarding specific themes and topics related to reproductive politics. Course material and discussions draw from varied perspectives and interdisciplinary resources, including sociology, demography, anthropology, history, medicine, and public health.	IS



## Sociology

SYA 4400	Social Statistics	This course involves the application of statistical techniques to sociological data as illustrated in the research and writing of social scientists. As a course for majors, it represents an important part of the student's methodological training with respect to the statistical analysis of data typically used by sociologists. The student is expected to carry out a number of exercises involving the statistical analysis of sociological data and to interpret the results. This is a required course for sociology majors.	S
SYA 4935	Capstone for Outstanding Majors	In this course, through course readings, discussion, and projects, students learn more about how to apply social theory and methods to conduct research and <u>design programs to address social inequality.</u>	IS
SYD 3020	Population and Society	This course examines the causes and consequences of population change in the United States and the world with an assessment of the impact of demographic <u>change on various social institutions.</u>	IS
SYD 3600	Cities in Society	This course explores changes in societal scale and structure associated with development of cities and urban societies, the impact on individuals and social groups of the urban context, and the ways that life in cities is influenced by social inequalities related to ethnicity, social class, and other dimensions of <u>social organization.</u>	S
SYD 3800	Sociology of Sex and Gender	This course examines how gender, as an identity, interaction, institution, and inequality, influences individuals' lives and organizes society.	IS
SYD 4510	Environmental Sociology	This course examines the larger social forces that shape our natural environment; the social foundations of environmental problems; and the social responses to environmental issues, conflicts, and movements.	S
SYD 4700	Race and Minority Group Relations	This course explores historical and contemporary race relations in the United States from a sociological perspective. Specifically, students study the underlying issues that characterize the relations between and among different <u>ethnic and racial groups in the United States.</u>	IS
SYG 2010	Social Problems	This course represents a study of various contemporary social problems in an urbanized society, which may include such topics as education, the family, politics, the economy, race relations, drug use and alcoholism, over-population, <u>and other issues.</u>	S
SYO 3100	Families and Social Change	This course is a basic sociological approach to conditions, issues, and problems of familial organization within the context of changing institutional structures of modern society. Attention is given to such questions as: How have spouse roles changed, and why? How do changes in the organization of work affect family experience? How are family and kinship patterns affected by an aging <u>population?</u>	IS

SYO 3460	Sociology of Mass Media	This course provides a sociological view of mass communications by critically examining the origin, history, and functions of the American mass media and its effect on social life.	IS
SYO 4300	Sociology of Politics	This course deals with American political institutions, political organizations, pressure groups, and the public's participation in political processes. Discussion focuses on current political issues from a sociological perspective.	IS
SYO 4402	Medical Sociology	This course explains why and how social structure influences the distribution of health and illness and illustrates how the medical care system is organized and responds.	IS
SYP 3350	Collective Action and Social Movements	This course explores the origins and organization of social movements, the dilemmas and challenges facing social movements, the relationship between social movements and political institutions, and the role of social movements in causing social change.	IS
SYP 3454	The Global Justice Movement	This course critically examines the history, organization, strategies, ideology, opponents, culture, and future prospects of the global justice movement.	IS
SYP 4650	Sports and Society	This course explores the topics of sport from a critical perspective focusing especially on inequalities in gender, race, class, and power. This class jointly examines sports as a social mirror that reflects status inequalities as well as the role of sports in perpetrating social inequalities.	IS
URP 3000	Introduction to Planning and Urban Development	This course introduces planning concepts and the role of planning in formulating policy, meeting critical problems, and shaping the future urban environment.	S
URP 4022	Collective Decision Making	This course provides an introduction to planning as a collective decision-making tool, and introduces the concepts of efficiency, equity, and environmental quality as competing bases for public decisions. The course examines tools for contributing to public decisions in varying circumstances, including unitary and diverse decision makers, certain and uncertain environments, and simple and complex goals.	S
URP 4402	Sustainable Development Planning in the Americas	Examines various dimensions of the "sustainable development" paradigm and its local-global policy implications, issues, and controversies with a focus upon North America and Latin America. Organized in three modules: 1) environmental philosophies that have influenced the movement; 2) North American approaches to planning for sustainable development; and 3) critical issues of sustainable development in Latin America.	S

Urban & Regional Planning	URP 4404	River Basin Management and Planning	This course introduces river basin management and planning and takes a systematic approach from biological, hydrological, and geopolitical viewpoints. Special emphasis is placed on the planning and management of transboundary (interstate and international) basins. The focus is on world river basin systems as well as on the local Apalachicola-Chattahoochee-Flint basin. Students are introduced to technical concepts and tools, including negotiation and math simulation tools.	S
	URP 4408	Food Systems Planning	This course provides a contextual understanding of food systems in the formation of cities, the impacts of food policy on food systems, and planning responses to the many challenges that arise in relation to the globalized food system.	S
	URP 4423	Introduction to Environmental Planning and Resource Management	This course is a general introduction to the problems of resource management and environmental planning, with an overview of problems and potential solutions and their relation to other public policy areas such as land-use control and regional development.	S
	URP 4710	Introduction to Transportation Issues and Transportation Planning	This course is an introduction to contemporary U.S. transportation problems, sources of funding, and legislation. Presents the theory and methods employed by planners in the process of resolving transportation problems.	S
	URP 4811	Multicultural Urbanism	This course studies past, present, and future urban geographies and the impact urban social and economic policy have on social equity. Students learn the significance of race, gender, ethnicity and Identity in urban development and urban life.	S
	URP 4936	Special Topics in Urban and Regional Planning	This course is a selected topics seminar for the discussion of unique and timely planning related issues. Content varies.	S
	URP 4936r	Special Topics in Urban and Regional Planning	This course is a selected topics seminar for the discussion of unique and timely planning related issues.	S
	URS 1006	World Cities: Quality of Life	In this course, major world cities are examined in terms of their natural, social, and built environments in order to assess those factors that promote quality-of-life and sustainability. Prospects for future growth and change are considered in light of demographic, cultural, economic, and political trends.	S
	URS 1006	World Cities: Quality of Life	In this course, major world cities are examined in terms of their natural, social, and built environments in order to assess those factors that promote quality-of-life and sustainability. Prospects for future growth and change are considered in light of demographic, cultural, economic, and political trends.	S

	ISS 2932	Seminar in Social Science and Public Affairs	This course examines key issues and controversies that students are likely to encounter as they pursue a major in one of the social sciences. Topics vary, and look at major fields of study within the Social Sciences. Designed for students enrolled in the Social Sciences and Public Policy Living-Learning Community (SSPPLIC)	IS
	ISS 3241	Foundations of Social Entrepreneurship and Innovation	This course provides a comprehensive overview of the emerging field of social entrepreneurship and innovation, examining how it promotes innovative, impactful, and sustainable solutions to social and environmental problems at the local, national, and international levels. The course looks at how the field is defined and expressed in three essential contexts: innovation and impact across the public, private, and citizen sectors; social enterprise within the context of nonprofit, for-profit, and hybrid organizations; and social transformation throughout an entire system.	S
	ISS 4014	Evidence Based Public Policy	This interdisciplinary public policy course emphasizes the social science concepts which provide fundamental insights into how public policy is created through collective action and how it can succeed or fail by the actions of individuals and institutions.	S
	ISS 4304	Contemporary Social Problems	This course is designed to introduce the benefits and methods of interdisciplinary research and study. This course uses multiple and interrelated perspectives to identify and explore social issues and problems. Students are guided through the process of building interdisciplinary perspectives to maximize cognitive skills, critical thinking and problem solving skills.	IS
	SOW 1054	Human Services Experience	This course entails a direct human service experience in a social services	IS
	SOW 4104	Human Behavior in the Social Environment	This course focuses on reciprocal relationships between human behavior and social environments. Content includes system theory, an ecological perspective, and life course theories that focus on human development at the individual and family level, including interactions between and among systems of all sizes, including groups, societies, and economic systems.	S
	SOW 4108	Women's Issues and Social Work	This course is designed to acquaint students with the factors that affect women throughout life and the role that social work plays in addressing these issues.	IS
	SOW 4152	Human Sexuality	This course is a survey of issues and problems associated with human sexuality, intended for social workers and others in helping professions. Emphasis is placed on sexually oppressed groups, sexual life cycle from a psychosocial perspective, and student's attitudes and values regarding sexuality.	IS

Social Work

SOW 4247	Homelessness in America: People, Programs and Policies	This course covers poverty in the United States, with particular emphasis on homelessness. It includes content related to values and ethics in programs and policies as well as cultural diversity among people in poverty. Particular attention to those who suffer from poverty and other societal oppression, such as those who are also people of color, women, gays, lesbians, HIV positive, or disabled.	IS
SOW 4290	Ethical Issues in Social Work Practice	This course provides students with a framework of knowledge and skills to prepare them for effective and ethical decision making that is congruent with codes of ethics and standard practice in the social-work profession. Also explored are the principles of ethical decision making and various value systems.	IS
SOW 4323	Social Work Practice with Groups	This course focuses on the development of the generalist practice skills of engagement, assessment, intervention, and evaluation with social work client and community groups. This course covers practice skills that contribute to group effectiveness, including composition, structure, dynamics, goal setting, and evaluation. Course content also includes examining the empirical base of a range of theories and models for social work with groups.	IS
SOW 4341	Social Work Practice with Individuals and Families	This course focuses on the development of the generalist practice skills of engagement, assessment, intervention, and evaluation with individuals and families in social work. The empirical bases of a range of theories and models of social work practice are examined, along with applications to generalist social work practice. Ways to promote social and economic justice while practicing as a social worker are also discussed.	S
SOW 4360	Social Work Practice with Communities and Organizations	This is one of three courses in the practice foundation curriculum. The course is designed to introduce students to a range of theories and models of social work practice from an ecological framework.	S
SOW 4620	Diversity and Social Justice	This course enhances student understanding of human diversity and prepares students to engage in a lifetime pursuit of cultural competence. Students are encouraged to reflect upon and discuss the intricacies of their own particular dominant and/or minority social statuses and their relations to other individuals and communities. The course is designed to train students to apply theoretical frameworks to the forms and mechanisms associated with diversity, differences, and oppression. Emphasis is placed on enhancing respectful and empathic communication, and on the advancement of social and economic justice and human rights in national and global contexts.	S

SOW 4784	International Social Work and Social Welfare	This course prepares students for international social-work practice and for transitional work with immigrants, refugees, international migrants, etc. The course also introduces international perspectives in the social-work field and offers varied examples of social-work practice in the U.S., and Western, Central European, and Caribbean nations and examines the impact of the global interdependence on social-work practice and policy and helps students learn to critically analyze varied practice approaches utilized in dealing with international welfare issues.	IS
SOW 4940	International Community Engagement	This course utilizes a service learning experience in an international social services organization to introduce students to international social work practice and a range of global social issues that shape human welfare and social development.	S
SOW 5034	The Social Work Profession	In this course, students begin to identify with the social work profession, its history, mission, and core values, and conduct themselves in accordance with the ethical principles that guide professional practice. Students also learn how the social work profession engages in policy and practice to address issues of social and economic well-being. They begin to recognize the social, political, economic, and environmental influences on client systems of all sizes and apply them to the conduct of social work practice.	S
SOW 5249	Homelessness in America: People, Programs and Policies	This course covers poverty in the United States, with particular emphasis on homelessness. It includes content related to values and ethics in programs and policies as well as cultural diversity among people in poverty. Particular attention to those who suffer from poverty and other societal oppression, such as those who are also people of color, women, gays, lesbians, HIV positive, or disabled.	IS
CJC 3311	Corrections: Practices and Perspectives	This course introduces the major issues concerning the history, law, practices, and perspectives in American Corrections. Students examine the interaction of correctional perspectives and practices, their consequences, and policies being advocated to change them.	IS
CJE 3761	Introduction to Underwater Investigation	This course presents the history and principles of basic oceanography, physics, and physiology as they relate to exposure to compressed gas environments and how to deduce safe parameters from those principles. This course provides the theoretical foundation for individuals preparing to be scientific investigators underwater.	IS

	Public Safety	CJE 3761L	Introduction to Underwater Investigation Laboratory	This laboratory course presents the principles and practice of compressed-gas as a life-support system for underwater hyperbaric exposure. This course is designed to develop proficiency in the basic skills required to perform safe underwater investigations, including recording observations and conducting underwater environmental surveys. Additional equipment fee required.	IS
		CJJ 3013	Youth Culture and Crime	This course explores the unique characteristics of juvenile offending and victimization by examining the cultural traits that differentiate youths from society in general. In doing so, the class investigates various distinct subcultures globally and the relationship between specific forms of offending and subcultural traits.	IS
	Recreation	LEI 3004r	Introduction to Recreation, Tourism and Events	This course provides an introduction to the nature and diversity of recreation pursuits and the social and cultural forces that influence leisure related choices. Students examine the various ways in which recreation is organized for delivery by professionals working in the recreation and event industry. Career opportunities in recreation, park, and event management are explored.	IS
		LEI 3266	Outdoor Adventure Education	This course provides education in teaching leadership and programming skills for outdoor adventures through observation, direct participation and skills demonstration.	IS

College	Department	Course #	Name	Description	S/IS
	Anthropology	ANT 2000	Introduction to Anthropology	This introductory course offers a holistic approach to understanding what it means to be human, studying humans and human behavior from the perspectives of evolution and genetics, the archaeological record, and language and culture.	IS
		ANT 2410	Introduction to Cultural Anthropology	This course introduces global diversity through the discipline of cultural anthropology which explores and analyzes the commonalities across societies as well as the unique diversity of human societies and cultures. The course introduces key concepts including kinship, gender, culture, religion, race, consumption, nationalism, and globalization, and provides an opportunity to learn more about these concepts in a variety of social and cultural contexts around the world.	IS
		ANT 2511	Introduction to Physical Anthropology and Prehistory	This course introduces theory and principles of genetically based evolution. It reviews fossil evidence for human evolution and competing ideas about the specific pathways to modern humans. It emphasizes the genetic unity of humankind and the universal features that underlie individual and cultural diversity.	IS
		ANT 3141	World Prehistory	This course outlines the major events in human cultural and social evolution and includes a brief presentation of general archaeological methods and objectives. The course focuses on the evolution of civilization in the Middle East, Europe, China, Africa, and the Americas.	IS
		ANT 3451	Race: Biology and Culture	This course examines the concept of race from the perspectives of biological and cultural anthropology, beginning with the study of modern human biological variation and its clinical distribution. This biological patterning is then contrasted with the social categories of race. The final section of the course covers the history of the concept of race, the ways humans culturally construct divisions in different societies, and the continued effects of racial concepts on science and on modern cultures.	S
		ANT 4465	Foodways Archaeology	This course addresses the topic of food from an anthropological archaeological perspective. The course examines the role food played in shaping identity, gender construction, ethnicity and rituals in past societies. The course also works to engage other disciplinary perspectives, such as those from history, literature, economics and environmental studies, as it attempts to make larger connections with the ways in which food and eating are holistically approached from an anthropological perspective.	S
		BOT 3015	Plant Biology	This course is an introduction to evolutionary relationships, natural history, ecological adaptations, and physiology of plants, fungi, autotrophic protista, and prokaryotes.	IS



BOT 3015L	Plant Biology Laboratory	This course introduces evolutionary relationships, natural history, ecological adaptations, and the physiology of plants, fungi, autotrophic protista, and prokaryotes.	IS
BOT 3143C	Field Botany	This course is an introduction to plant taxonomy with emphasis on laboratory and field study. Orientation to principles of identification, classification, and rules of botanical nomenclature.	IS
BOT 4394	Plant Molecular Biology	This course explores molecular biology and biotechnology of plant growth and development.	IS
BOT 4503	Plant Physiology	This course provides students with a comprehensive overview of plant physiology. Plant physiology is the study of plant processes, structure and function. Physiology describes the mechanisms used by living organisms to solve problems they encounter as they grow and develop. Plants are unique, as sessile, photoautotrophic organisms, and diverse. As such, plants provide the opportunity to study many interesting physiological topics and mechanisms.	IS
BOT 4503L	Plant Physiology Laboratory	This lab provides students with a comprehensive overview of plant physiology. Plant physiology is the study of plant processes, structure and function. Physiology describes the mechanisms used by living organisms to solve problems they encounter as they grow and develop. Plants are unique, as sessile, photoautotrophic organisms, and diverse. As such, plants provide the opportunity to study many interesting physiological topics and mechanisms.	IS
BSC 1005	General Biology for Non-majors	This course consists of four selected topics in contemporary biology.	IS
BSC 1005L	General Biology Laboratory for Nonmajors		IS
BSC 2010	Biological Science I	The course provides the building blocks necessary for a student to gain a strong foundation in general biology. Topics covered provide an overview of biological processes and function at the molecular, cellular and organismal level.	IS
BSC 2010L	Biological Science I Laboratory	This course introduces basic chemistry, energetics, metabolism, and cellular organization; molecular genetics and information flow; animal and plant function.	IS
BSC 2011	Biological Science II	The course provides an overview of the processes underlying animal embryonic development, inheritance genetics, evolution and ecology.	IS
BSC 2011L	Biological Science II Lab	This course focuses on reproduction and development, transmission (Mendelian) genetics, population biology, ecology, and evolution.	IS

BSC 2085	Anatomy and Physiology I	This course is the first of a two-semester human anatomy/physiology sequence emphasizing the cell, stimulus-response concept, and the skeletal-muscular and first half of the nervous systems.	IS
BSC 3016	Eukaryotic Diversity	This course provides an overview of the diversity of eukaryotic organisms (protists, plants, fungi and animals), the evolutionary origin of this diversity, and its societal relevance. Comparisons of exemplar organisms are used to illustrate broad themes in the anatomy, physiology, behavior, life cycles, and ecologies of all eukaryotes.	IS
BSC 3052	Conservation Biology	This course focuses on the history of the conservation movement, the research on populations of animals and plants that is relevant to man's impact upon the environment, pollution in terrestrial and aquatic ecosystems, endangered species, government regulation, and sustainable development. Ecology and evolution behind conservation and management of biological diversity.	IS
BSC 3312	Marine Biology	This course explores marine geology, chemistry of the oceans, oceanic circulation, oceanographic techniques, the marine environment and marine life.	IS
BSC 3402L	Experimental Biology Laboratory	This course is designed to teach students about the process of biological research. Each section of the course is organized around a particular biological concept. The focus in this course is two-fold. First, students are provided with basic background in the field of study. This is done through lab work and lecture. Students are provided with documents to help them with their work. Second, and more important, is the development of skills in biological research. The skills are developed in laboratory and lecture exercises as well as outside of class assignments, culminating in an independent research project, which they present both orally and in writing. This course meets the University's Oral Communication Competency Requirement, and the Upper Division Writing Requirement. Developing oral and written communication skills are major components of this course.	IS
BSC 3930	Seminar in Biological Frontiers	This course is a weekly seminar covering topics in biological research.	IS
BSC 3938	Careers in the Biological Sciences	This course is intended for biology sciences majors at any point in their undergraduate career, but is most beneficial to those in their first three years. Career options in biology-related fields (including health professions) and the preparation they require are presented for students planning to immediately enter the job market or to continue their academic careers upon graduation.	IS

BSC 4821c	Biogeography	This course will cover the full range of biogeography with an emphasis on ecological and evolutionary biogeography, the processes that help determine distributions, and the analytical methods used to describe distributions and test processes. Topics include the physical environment (geology, meteorology), the distribution of ecosystems and biomes across the globe, speciation, common geographic patterns, diversity gradients, island biogeography, and historical (evolutionary) biogeography. There is a laboratory section as part of this course in which student working in groups will analyze geographic data sets to search for patterns and test hypotheses with the scientific method.	IS
BSC 4931	Senior Tutorial in Biological Science	This course focuses on selected topics in contemporary biological science.	IS
BSC 4937	Seminar in Living Marine Resource Ecology	This seminar course in marine resource ecology designed to introduce students to a broad array of current research priorities and interests in marine ecology. Students have the opportunity to meet with resource managers and scientists from both the biological and social fields. Lecture topics range from life history studies of marine fish to the economic consequence of marine policy.	IS
BSC 4941	Internship in Biological Science I	This internship course is designed for majors in the department of Biological Science who wish to gain real world experience in their field of interest through on-the-job practice.	IS
BSC 4941r	Internship in Biological Science II	This internship course is designed for majors in the department of Biological Science who wish to gain real world experience in their field of interest through on-the-job practice.	S
GEO 4300	Biogeography	This course emphasizes ecological and evolutionary biogeography, the physical processes and organismal characteristics that determine distributions, and the analytical methods used to describe distributions and test processes. Geographic data sets are analyzed in lab sessions to search for patterns and test hypotheses with the scientific method.	IS
IDS 2132	Busting Common Biology Myths	This course explores areas of biology popularized in the media, politics and global health policies. Students determine strengths and weaknesses of opposing arguments of controversial current biological issues using information found in the scientific literature to support or critique positions. Popular biological issues such as pros and cons of vaccination, the use of stem cells, or the dangers of genetically modified organisms are studied.	S

Biological Science

IDS 2136	Biotechnology: Impact of Life and Sciences on Society	This course addresses the important impacts that new biotechnological innovations have on society. Using examples from genetically modified crops to advances in personalized medicine, students explore the scientific bases of emerging biotechnologies and compare the scientific data with societal perception and acceptance.	S
IDS 2470	The Ecology of Food	This course explores the basic ecology of agriculture and fisheries and consider how conventional and alternative food-production practices generate and solve ecological problems. The course focuses on several major current issues (e.g. genetically modified organisms, pollinator declines, organic agriculture, and fisheries), and for each students learn the science behind the issue and the social forces shaping the problem. Students also learn through discussions of scientific and popular writings, lectures, hands-on and written projects, oral presentations, local speakers and field trips.	S
IDS 3232	Living Green, Theory to Action	This course examines environmental issues, the three 'E's of sustainability (ecology, equity, and equality), ways to integrate sustainability into infrastructure and social structures, and practical solutions and skills for making personal and professional decisions that support living a sustainable life.	S
MCB 2004	Microbiology for Health Services	This course covers microbiology for students planning careers in the health services, with emphasis on infectious disease, food microbiology, and public health.	IS
MCB 2004L	Microbiology for the Health Services Laboratory	This course covers microbiological techniques including the isolation, typing, and identification of bacteria, properties of pathogenic bacteria, and food microbiology.	IS
MCB 4403	Prokaryotic Biology	This course covers structural and functional characteristics of microorganisms, with emphasis on prokaryotes (bacteria and archaea) and viruses. Topics include: prokaryotic cell structure and function, physiology and genetics of prokaryotes and viruses, physiological and molecular aspects of microorganisms and human disease, and biotechnological applications of microbial physiology (environmental, food, and industrial microbiology).	IS
MCB 4403L	Prokaryotic Biology Laboratory	This course covers laboratory methods for growth, handling, and study of prokaryotes and other types of microorganisms. Topics include: aseptic technique and isolation of pure cultures; microscopic methods; effects of environment on growth; viruses; physiological characterization methods; and methods related to medical, environmental, and food microbiology.	IS

MCB 4502	Virology	This course covers general virology including virus structure and replication cycles. Students review major families of the bacterial (bacteriophage) plant and animal viruses, with emphasis placed on human viruses and infectious diseases. Students also discuss subviral particles, prions and viroids.	IS
PCB 3043	General Ecology	This course focuses on topics such as: population biology; population growth; community processes, succession, nutrient cycling, and energy flow; species interactions; ecological efficiency; and biogeographical ecology.	IS
PCB 3043L	Ecology Lab	Students will be introduced to common questions and methods from basic and applied ecology using both lab and field exercises. These include quantifying effects of density, competition, and predation on populations, understanding food webs and trophic interactions, as well as the biogeography of movement and species ranges, succession in long-leaf pine forests, local stream biomonitoring, and foraging ecology.	IS
PCB 3043L	Lab for Ecology	In this course, topics covered include quantifying populations and population growth; species interactions such as competition, predation, and mutualisms; documenting community patterns across gradients; adaptation and traits of species; habitat use, movement and species ranges; natural history of local habitats	IS
PCB 3063	General Genetics	This course is an introduction to the principles of transmission and molecular genetics of prokaryotes and eukaryotes and significance of these principles to other aspects of biological science.	IS
PCB 3134	Cell Structure and Function	This course focuses on topics such as: cellular chemistry and physiology, morphology, and function of cellular organelles; and cellular motility, growth, division, communication, and regulation.	IS
PCB 4024	Molecular Biology	This course studies the molecular basis of cellular function with emphasis on the activities of DNA, RNA, and the regulation of gene expression.	IS
PCB 4233	Immunology	This course analyzes the tissues, cells, and molecules of the immune system and their relationships to disease and transplantation.	IS
PCB 4233L	Laboratory in Immunology	This course analyzes the tissues, cells, and molecules of the immune system and their relationships to disease and transplantation.	IS
PCB 4253	Developmental Biology	This course discusses a number of topics, including fertilization, early embryonic events, organogenesis, differentiation, morphogenesis, cytoplasmic localization, determination, and differential gene expression.	IS

PCB 4402	Ecology of Infectious Disease	This course explores how concepts and tools of basic ecology can and have been used to understand the dynamics of infectious disease, and contribute to our ability to predict, prevent, and control disease outbreaks. Students consider diseases of humans and their domesticated plants and animals, as well as the role of disease in natural systems. Students are also expected to read extensively in the primary literature, and to contribute to regular class activities and discussions as well as research and present information on specialized topics such as the role of conservation corridors in the spread of disease, possible responses to pandemics and bioterrorism, and identification of sources of emerging diseases.	IS
PCB 4674	Evolution	This course places emphasis on the processes of evolution: origin of life, theories of evolution, sources of variation, natural selection, population systems, isolating mechanisms, evolution above the species level.	IS
PCB 4843	Fundamentals of Neuroscience	This course emphasizes cellular and molecular approaches to neuroscience and brain function and emphasizes simple model systems including invertebrates.	IS
ZOO 3141L	Animal Diversity Laboratory	This introductory zoology laboratory course provides an overview of the diversity of animal form and function through comparisons of exemplar organisms representing the major animal phyla. Students are expected to dissect preserved specimens and to make detailed observations of both live (invertebrate) and preserved animals. Students develop critical zoological laboratory skills in dissection, the correct use of both compound and dissecting microscopes, the ability to carefully observe and draw specimens and images from microscope slides, and the application of their knowledge on laboratory practicals. Outside assignments allow students to recognize the diversity among our local fauna. The knowledge and skills gained from this course provide a solid foundation for more specialized studies in animal biology.	IS
ZOO 3205	Advanced Invertebrate Zoology	This course focuses on the structure, function, behavior, and evolution of the invertebrate phyla, especially those taxa living in the sea.	IS
ZOO 3205L	Advanced Invertebrate Zoology Laboratory	This laboratory deals with the structure, function, behavior and ecology of the invertebrate phyla, especially those taxa living in the sea.	IS
ZOO 3713C	Comparative Vertebrate Anatomy	This course emphasizes form and function and origin and evolution of structure.	IS
ZOO 4353C	Biology of Higher Vertebrates	This course covers the systematics, ecology, and evolution of birds and mammals.	IS

ZOO 4454	Biology of Fishes	Introduction to the evolution, diversity, biology, ecology, and management of fishes	IS
ZOO 4513	Animal Behavior	This course discusses modern perspectives of the behaviors of animals.	IS
ZOO 4753C	Histology	This course explores the microscopic anatomy and functions of the cells, tissues, and glands composing the organs and systems of humans.	IS
ZOO 4926	Biology of Sharks & Rays	Introduction to the Evolution, diversity and biology of elasmobranch fishes with a focus on fishery and conservation issues.	IS
BCH 3023	Survey of Biochemistry	This course is designed to provide a survey of biochemistry topics relevant to those in the allied health and pre-medicine fields of study.	IS
BCH 3023L	Survey of Biochemistry Laboratory	This course focuses on application of molecular biology techniques to a broad range of biochemistry topics and provides a basic survey of information relevant to students in allied health and pre-medicine fields of study.	IS
BCH 4053	General Biochemistry I	This course is the first course required for biochemistry majors; the course is also recommended for other majors who intend to study advanced biochemistry. Topics covered include protein structure, protein function, membranes, enzyme catalysis, bioenergetics, carbohydrate metabolism, and lipid metabolism.	IS
BCH 4053L	General Biochemistry I Laboratory	This lab explores laboratory methods in biochemistry including electrophoresis, chromatography, cell fractionation, enzyme assays, ligand interactions, and recombinant DNA technology.	IS
BCH 4054	General Biochemistry II	This course is the second course required for biochemistry majors; it is also recommended for other majors who intend to study advanced biochemistry. Topics include quantitative analysis of assembly and mechanisms of molecular machines involved in metabolic and information transfer processes, how proteins bind proteins, nucleic acids, and ligands, as well as the methods for characterizing structures and interactions.	IS
CHM 1020	Chemistry for Liberal Studies	This course introduces basic chemical principles without an extensive use of mathematics and illustrates with applications in health, energy, and the environment. The course strives to show chemistry as a human endeavor that provides insight into the natural world and informs our decisions as citizens and consumers.	IS
CHM 1020L	Chemistry for Liberal Studies Laboratory	This laboratory emphasizes major topics from CHM 1020 relating chemistry concepts and techniques to everyday life experiences. This laboratory-based course meets two hours a week.	IS

Chemistry	CHM 3217	One Semester Organic Chemistry	This course provides a rigorous one semester overview of the structure, properties, and reaction of organic compounds. It is intended for students who are willing and able to move more quickly into advanced course work.	IS
	CHM 3218	One Semester Biochemistry	This course introduces the basic concepts of biochemistry and molecular biology from an organic chemistry structural and mechanistic perspective.	IS
	CHM 3218	One Semester Biochemistry	This course introduces the basic concepts of biochemistry and molecular biology from an organic chemistry structural and mechanistic perspective.	IS
	CHM 4080	Environmental Chemistry I	This course focuses on the application of geologic and geochemical principles to environmental issues. Topics include: an evaluation of contaminants in surface and ground water; hydrocarbon geochemistry and petroleum contamination; waste management, including solid, toxic and nuclear waste; air quality issues, including radon and asbestos; geologic hazards in upland and coastal areas; environmental methods and instrumentation, quality assurance and quality control in environmental analysis; principles of toxicology; risk assessment and risk management.	IS
	CHM 4081	Environmental Chemistry II	This course studies the organic geochemistry of natural waters and sediments. It offers an overview of the sources of organic matter in aquatic systems, the important reactions and transport mechanisms that control the biochemical cycling of organic carbon in these systems, and the impact of naturally-occurring organic carbon on environmental and ecological processes. Attention is also devoted to anthropogenic (xenobiotic) organic molecules. It also discusses how analytical techniques such as <sup>13</sup> C NMR, mass spectroscopy, and capillary electrophoresis provide useful organic biogeochemical information.	IS
	CHM 4714	Chemistry of Materials	This course is an introduction to materials chemistry, focusing on the structure, properties, and functional applications of molecular materials, polymers, glasses and ceramics, metals and alloys, and bio- and nanomaterials.	IS
	CLA 3501	Gender and Society in Ancient Greece	This course examines the role and status of women in ancient Greek society, as depicted in its literature, art, law, and religion.	IS



Classics	IDS 3033	The Animal in Ancient and Modern Thought	This course explores human attitudes toward non-human animals in ancient and modern culture. Students read a sampling of ancient and modern literature and philosophical thought and engage with a range of themes over the course of the semester, including beliefs about animal consciousness, human-animal social relationships, the use of animals in literature and art, and the ethics of <u>animal treatment</u> .	IS
Computer Science	CEN 4681	Expert Systems	This course covers definitions and historical development, methodology tools for analysis and design, survey of existing systems, inference engines, and theory and applications of fuzzy relational products to new developments in <u>inference engines</u> .	IS
	CIS 3250	Ethics and Computer Science	This course presents basic ethical theories and analysis methods as they apply to ethical, social, and legal issues in computing and information technology. Case studies and hypothetical scenarios are discussed for their social, ethical, and legal implications, as well as analyzed through various ethical-analysis methodologies. The course fosters the development of skills in logical and critical analysis of issues and viewpoints.	IS
	EOC 4631	Marine Pollution	This course introduces students to chemical, physical, and biological aspects of dominant marine pollutants, including dissolved toxic metals, complex organic and inorganic contaminants, and particulate pollutants. Topics cover the sources and types of dominant contaminants, their key characteristics, their pathways (as traced through the marine ecosystem from the source to the sinks), their impact on the environment, as well as approaches that could lead to the reduction or elimination of pollutants in the marine environment.	IS
	ESC 1000	Introductory Earth Science	This course is an introduction to the study of planet Earth, its internal dynamics, and surficial weathering, erosion, sedimentary processes, the composition and motion of its oceans and atmosphere, and its origin as part of the solar system.	IS
	ESC 1000L	Earth Science Laboratory	This course is a laboratory introduction to earth science as the study of planet earth, specifically a study of minerals, rocks, maps, oceans and the atmosphere.	IS
	EVR 1001	Introduction to Environmental Science	This course is an introduction to environmental science that covers the basic functioning of the earth's environmental system and human effects on that <u>system</u> .	S
	EVR 1001L	Introduction to Environmental Science Laboratory	This course is a virtual-reality lab that covers various aspects of environmental science. Students submit lab reports on-line for each module that include data <u>analysis and graphical interpretation</u> .	S

EVR 4922	Environmental Science Capstone	This course allows students an opportunity to apply knowledge from coursework to a number of individual and group projects. There is a strong field component conducted on and off campus using techniques in basic surveying, sampling, and safety.	S
GLY 1000	Dynamic Earth	This course is an introduction to geology as the study of planet Earth, its internal dynamics, and its surficial weathering, erosion, and sedimentary processes.	IS
GLY 1000L	Dynamic Earth Laboratory	Geologic lab work including: glacial processes, Antarctic research, groundwater, etc	IS
GLY 1030	Environmental Issues in Geology	This course examines environmental issues as they relate to geological phenomena, which include volcanic and earthquake hazards, resource and land-use planning, air and water pollution, waste disposal, glaciation and sea-level change, landslides, flooding, shoreline erosion, and global change issues.	S
GLY 1102	Dinosaurs and Disasters on an Evolving Earth	This course examines the history of the earth and its organisms as recorded in the fossil and rock record; principles of geological and paleontological research; evolution of the dinosaurs, mass extinctions, and effects of past continental movements on the diversity of life.	IS
GLY 2010C	Physical Geology	This course is an introduction to surficial and internal processes affecting a dynamic planet Earth. For majors in geology and natural sciences. Two-hour laboratory required.	IS
GLY 2100	Historical Geology	This course examines the history of the earth and is an introduction to the fossil record.	IS
GLY 2100L	Historical Geology Laboratory	This laboratory is a study of the physical and biological evidence for the known history of the earth.	IS
GLY 3039	Energy, Resources and Environment	This course examines the origin of our energy and mineral resources (e.g., fossil fuels, uranium, hydrogen), their global supply, and the environmental impacts of extracting and utilizing these resources. Emphasis is placed on the chemical nature of the resources and the impact on the chemical composition of the ocean/atmosphere and the global heat budget. Field trips, in-class demonstrations, and homework exercises provide firsthand experience. The sources of energy, availability, renewables, and environmental consequences of waste disposal.	S
GLY 3200C	Mineralogy and Crystallography	This course is an introduction to mineralogy, crystal chemistry, and crystallography. Three hour laboratory required.	IS
GLY 3310C	Igneous and Metamorphic Petrology	This course focuses on the classification, description, and origin of igneous and metamorphic rocks; relation of these rocks to tectonic processes.	IS

GLY 3400C	Structural Geology	This course focuses on the theory, processes, mechanics of rock deformation and the deformation of the earth's crust.	IS
GLY 3400C	Structural Geology	This course focuses on the theory, processes, mechanics of rock deformation and the deformation of the earth's crust.	IS
GLY 3610C	Paleontology	This course is a review of invertebrate biology, with emphasis on hard-part nomenclature; the occurrence, distribution, evolution, and ecology of fossil invertebrates.	IS
GLY 4240	Principles of Geochemistry	This course focuses on the crystal chemistry of silicates and other minerals; chemical principles applied to igneous, metamorphic, and sedimentary environments and processes; chemistry of natural aqueous systems; chemical equilibria of geologic systems.	IS
GLY 4451	Introduction to Geophysics	This course explores plate tectonics and earth structure. Current methods of probing the interior: seismology and seismic tomography, geomagnetics, geoid and gravity, geochemistry and geochronology, heat flow, mantle convection, core convection and the geodynamo.	IS
GLY 4544C	Sedimentation and Stratigraphy	This course surveys sedimentary rock types, principles of description and classification, sediment genesis and origin of sedimentary deposits, analysis and synthesis of stratigraphic sequences. Topics include: depositional systems; physical and biostratigraphy; geochronology and chronostratigraphy; magnetic, seismic, and sequence stratigraphy; and tectonic vs. climatic controls.	IS
GLY 4750	Geological Field Methods	This course provides a working knowledge and some experience of techniques, procedures, and tools that are essential to geological field research, the professional geologist, and the required summer field course.	IS
GLY 4790	Environmental Field Course	This course emphasizes the use of field-related observations in the study of environmental problems. Fieldwork includes the study of soils, surface waters and groundwater, erosion and mass wasting, and the chemical contamination of soils and surface waters. Evaluation of student performance in the course is based upon a series of written reports.	IS
GLY 4790	Field Course	This course is a series of field problems based largely on exposures of strata and structures. Preparation of geologic maps, sections, and reports.	IS
GLY 4820	Principles of Hydrology	This course focuses on the fundamentals of hydrogeology with an emphasis on groundwater flow and hydrochemistry. Both theory and applications are add used.	IS

GLY 4884	Environmental Geology I	This course examines the application of geologic and geochemical principles to environmental issues. Topics include: an evaluation of contaminants in surface water and ground water; hydrocarbon geochemistry and petroleum storage tank problems; waste management, including solid, toxic, and nuclear waste; air quality issues including radon and asbestos; geologic hazards in upland and coastal areas; environmental geologic methods and instrumentation; quality assurance and quality control in environmental analysis; principles of toxicology; risk assessment and risk management; and environmental assessments.	IS
IDS 2240	Sustainable Food and Water: Soil, Animals, Vegetables, and Grain	This course provides an overview of the issues involved in food and water security on a planet where a billion people are malnourished, while at the same time another billion are overweight. The course examines the science and sustainability of food production, water quality, and soil development.	S
ISC 2003	Global Change: Its Scientific and Human Dimensions	This course covers global environmental change, scientific and human dimensions, and international public policy implications. The science behind, and impacts from, global climate change.	S
ISC 3523C	Research Methods	In this course, students learn appropriate scientific research methods for several types of research questions. Using the inquiry method of learning, they develop a research question and an experiment to answer it, and then use statistical techniques to analyze their resulting data.	IS
MET 1010	Introduction to the Atmosphere	This course covers the structure of the atmosphere; weather processes and weather systems, including climatic processes.	IS
MET 1010L	Introductory Meteorology Laboratory	This course covers data analysis, instruments, and weather system models.	IS
MET 2101	Physical Climatology	This course covers global distribution of principal climatic elements with emphasis on physical causes. Statistical analysis of distributions of climatological variables.	IS
MET 2507C	Weather Analysis and Forecasting	This course is an introduction to meteorological observations, data, codes, and scalar analysis practices. Weather applications software systems and computing environments for meteorological analysis and weather forecasting techniques are examined.	IS
MET 2700	General Meteorology	This course covers atmospheric structure and composition; weather and circulation systems; physics of atmospheric processes, including thermodynamics of dry and moist air.	IS

MET 3103C	Climate Change Science	This course enables students to explore the science behind our understanding of climate change. The course provides an in-depth exploration of the use of proxy, in situ, remote-sensing data, climate models, and their public policy implications. Students gain experience in evaluating internal and external forcings on the climate system and make quantitative assessments of change. The course also gives students an understanding of energy transfer methods between the atmosphere, cryosphere, oceans, and fresh water systems.	S
MET 3220C	Meteorological Computations	This course covers the solution of meteorological problems using computer and statistical programs; distributions of meteorological variables; meteorological programming.	IS
MET 3300	Introduction to Atmospheric Dynamics	This course will examine a variety of topics, including equations of motion, mass conservation, thermodynamics, vorticity, and geostrophic, gradient and thermal winds.	IS
MET 3520	Current Weather Discussion	This course includes discussion of facsimile analysis and prediction materials.	IS
MET 3940	Weathercasting	This course includes practice in preparing and presenting weathercasts for radio and television.	IS
MET 4159	Selected Topics in Meteorology	This course covers selected topics in meteorology and climatology not covered in other courses.	IS
MET 4301	Atmospheric Dynamics I	This course covers acceleration in rotating curvilinear coordinates; momentum, continuity, and energy equations; geostrophic, gradient, and thermal winds; generalized coordinates; circulation and vorticity theorems; scale analysis; Reynolds stresses; Prandtl and Ekman layers; developing baroclinic systems.	IS
MET 4302	Atmospheric Dynamics II	This course covers linear perturbation theory; sound, gravity, and Rossby waves; numerical weather prediction; baroclinic and barotropic instability; energetics. An introduction to theory of partial differential equations applied to meteorological problems is also presented.	IS
MET 4400C	Meteorological Instrumentation and Observations	This course covers theory and practice of calibration and operation of basic sensors, measurement of temperature, heat flow, fluid flow, pressure, and moisture.	IS
MET 4420	Atmospheric Physics I	This course covers classical equilibrium thermodynamics; first and second law, entropy, phase changes, potentials. Physics of moist air; physics of aerosols; condensation of water vapor on aerosols. Microphysics and dynamics of clouds; growth of ice crystals.	IS
MET 4450	Atmospheric Physics II	This course covers radiative processes in the atmosphere; radiative transfer equation, absorption by gases, Rayleigh scattering. Remote sensing using radars and satellites.	IS

MET 4500C	Synoptic Lecture- Laboratory I: Basic Analysis Techniques	This course covers the analysis of scalar and vector fields, introduction to the three-dimensional structure of atmospheric systems, and thermodynamic diagrams.	IS
MET 4501C	Synoptic Lecture- Laboratory II: Four- Dimensional Structure	This course covers synoptic calculation and four-dimensional analysis of weather systems.	IS
MET 4705	Operational Meteorology	This course introduces observational analysis products used in operational weather forecast offices. Topics include applications of radar and satellite data, the various applications of numerical weather prediction, and types of weather forecasts.	IS
MET 4945	Meteorology Internship	This course is a supervised internship individually assigned to accommodate student's background and objectives.	IS
OCB 4631	Estuarine and Coastal Ecology	This interdisciplinary course addresses the ecology of estuaries and the part of the inshore waters with which estuaries interact directly. The lectures address the general ecological principles that govern the productivity and diversity of estuaries, including their hydrodynamics, sedimentology, chemistry, as well as plant and animal community structure. Key species of estuarine systems are introduced and cycles of carbon and nutrients are explained.	IS
OCB 4637	Marine Benthic Ecology	This course studies the physical setting and ecological organization of the communities found in the rocky intertidal, in the fouling habitat, on sandy beaches, in subtidal soft bottoms, and in the deep sea. This is presented through lectures, substantial reading, and class discussions.	IS
OCC 4002	Basic Chemical Oceanography	This course focuses on the chemical composition of seawater, carbon dioxide system, nutrients, trace elements, and biogeochemistry.	IS
OCC 4060	Environmental Science Modeling	This course gives students an understanding of explanatory and predictive models of the earth's systems and environmental processes therein. Analytical and numerical methods for solving equations are examined and applied. Discussions cover relevant scientific issues, mathematical and computational procedures, visualization techniques, as well as the use of models in research and decision making.	IS
OCE 1001	Elementary Oceanography	This course studies the structure and motion of the ocean and its environs, properties, populations, and energy budget.	IS
OCE 3555	Environmental Science II: Habitable Planet	This course explores the Earth system at and above the surface of the Earth. It combines Earth and biological sciences to explore the co-evolution of the Earth and life over geological time. Evolution of the hydrosphere, atmosphere, and lithosphere are discussed.	IS

OCE 4008	Principles of Oceanography	This course focuses on dynamic motions and life processes in the marine environment. Long-term geologic history of the oceans and recent changes caused by man. An overview of oceanography for upper-division students majoring in science, mathematics, or science teaching.	IS
OCE 4017	Current Issues In Environmental Science	This course is taught at an introductory level and includes discussions of current ground-breaking research, environmental problems, and approaches to solving them. It consists of presentations by experts on their current research topics or environmental issues. Covers topics such as overpopulation, climate, sea level, energy, water resources, food production.	S
OCE 4064	Marine Conservation Biology	The purpose of this course is to understand anthropogenic impacts on the world's marine biological resources and ways to mitigate those impacts. The course will begin with a brief overview of some relevant key concepts in marine biology and ecology, the next portion will focus on anthropogenic activities and how they affect the global ocean and marine biodiversity. The last portion of the class will focus on means of protecting the ocean's life through responsible management.	S
OCE 4265	Coral Reef Ecology	In this course, the student learns the components of warm water coral reef ecosystems, their functions and interactions, and their response to environmental change. The biological, chemical and physical processes that govern the ecology of warm water coral reef ecosystems are addressed as well as the anthropogenic impact on reef ecosystems and the management of coral reef ecosystems.	IS
OCE 4930	Studies in Oceanography	Topics vary.	IS
OCG 3103	The Earth System	This course is an examination of the modern approach to understanding Earth's climate history and climate change on a global scale.	S
OCP 4005	Introduction to Physical Oceanography	This course examines waves, currents, tides, El Nino, and climate change prediction.	S
PEN 1136	Theory and Practice of Compressed-Gas Diving	This course is an introduction to the field of compressed-gas diving, that exposes students to the use of underwater technology and techniques in support of science.	IS
AML 3682	American Multi-Ethnic Literature	This course introduces cross-cultural literary traditions, looking at historical rationales and interconnections among communities as well as vital differences.	IS

English	IFS 2030	Reading, Writing, and Speaking in the Digital Age	This course explores the implications of the digital revolution: what it means for the publishing industry, books, magazines, copyright, libraries, how we read and write, and how we organize ourselves as a society.	IS
	IFS 2122	The Tourist Trap: The Good, the Bad, and the Ugly	This course is designed to help students think critically about cultures with which they are familiar, to learn about cultures with which they are less familiar, and to navigate the complex ways they perceive and participate in and with multiple cultures. Through an exploration of travel writing, journalism, literature, film, and music, students explore, discuss, and respond to in writing questions about the good, the bad, and the ugly of tourism and tourists.	IS
	LIT 3383	Women in Literature	In this course, students study texts that consider women's roles in society. The course focuses on women's gender roles and legal status during the Victorian period. What kinds of political and literary power did women have? What did women have to say about social and political matters? How did women use literary forms to communicate their arguments?	IS
	LIT 4205	Literature of Human Rights	This course is a study of literature in English and related materials relevant to the issue of human rights.	IS
	AMH 2095	American Indians in the United States	This course surveys American-Indian relations with the people and the government of the United States, beginning in the 1760s and continuing to the present. The course examines the Indians' diplomatic and military struggles, as well as to the Indian perspective on familiar historical events such as the Civil War, the New Deal, and the 1960s.	IS
	AMH 2097	Nationality, Race, and Ethnicity in the United States	This course explores the history of immigration to the United States. Topics include the evolution of ethnic cultures and the role of race in adjustment, and related conflicts from colonial times to the present.	IS
	AMH 4231	The United States, 1920-1945: Prosperity, Depression, and World War II	This course offers an overview of U.S. history from 1920 through 1945. Topics include political, economic, diplomatic, military, social, and cultural and intellectual developments during that period.	IS
	AMH 4270	The United States Since 1945	This course focuses on the political and cultural issues faced by the United States during the period of the Cold War (1945 to 1988). Special attention is given to postwar affluence, suburban America, the mass society, the movement from isolationism to interventionism, McCarthyism, the civil rights movement, social conflict in the 1960s, and the rise of postwar conservatism.	IS
	AMH 4530	U.S. Immigration History	This course explores the histories of different immigrant and migrant groups and how they have shaped and been shaped by the United States.	IS



## History

AMH 4630	North American Environmental History	This course introduces the changing relationships between human beings and the natural world in America through time.	S
AMH 4634	Florida Environmental History	This course applies the methods and approaches of environmental history to Florida, considering the changing relationships between human beings and the natural world through time. The field explores how nature has helped to shape culture as well as how humans have modified the natural world and transformed the land.	S
AMH 4684	Women and Children in the Civil Rights Movement	This course examines the role of women and children in the modern day Civil Rights Movement in the United States with the underlying themes of race, class and gender.	IS
HIS 3464	History of Science	This course is a study of the mutually-shaping relationships between social and political ideas and the histories of the various sciences.	S
HIS 4930	Environmental Policy	"Special Topics in History" (3). This course includes specialized approaches to history.	IS
HIS 4935	Sr. Sem.: Environmental Activism	This course is an advanced training in historical methods and historiography. The historical material varies from seminar to seminar depending upon the instructor's area of expertise.	S
HPS 3323	History and Philosophy of Environmental Science		IS
IFS 2026	Environment and Society	This interdisciplinary course in environmental history explores numerous diverse perspectives of the environment: history, ethics, literature, art, and, of course, science. The course asks, "What is the relationship between humans and the natural world?" and explores how nature has helped to shape culture as well as how humans have modified the natural world and transformed the land in the process of extracting resources, building structures, producing pollution, and importing exotic species.	S
IFS 2116	Digital Microhistory Lab	This course brings together microhistory, urban history, and digital history. Students collect comprehensive data about the events in a single city in a single year, through close reading of an English-language daily newspaper published in that city. They gather much of this data using digital methods and then work together to represent those events in a Web site that employs a variety of digital communication tools.	IS
LAH 1093	Latin America: A Cross-Cultural History	This course is a cross-cultural history of Latin America focusing on women, Native Americans, African-Americans, mestizos, and mulattoes in historical context.	IS

	LAH 3456	History of Panama Since 1940	This course covers the history of Panama from 1940 to the present. Emphasizes the impact of WWII, politics, social change, and democracy in Panama.	IS
	LAH 4470	History of the Caribbean	This course focuses on Cuba, Puerto Rico, and other Caribbean societies. European and United States colonialism and local Caribbean forces are studied to help understand the area's social, economic, and political problems and prospects.	IS
	LAH 4748	Social Revolutionary Movements in Latin America	This course is a thematic coverage of the history of social revolutionary movements in Latin America, using specific case studies drawn from, among others, the Mexican, Bolivian, and Cuban revolutions.	IS
	WOH 4235	Disease, Race, and the Environment	This course examines the close relationship between disease, race, and environment in the development of civilizations of the world.	IS
	WST 3015	Introduction to Women's Studies	This course introduces students to the field of Women's Studies. Topics include the construction of gender and gender roles in varying social and cultural contexts. Women's roles are examined from a variety of perspectives, which may include social class, religion, culture, and sexuality. The course includes an overview of theories of feminism	IS
	WST 3251	Women in Western Culture: Images and Realities	This course is an interdisciplinary examination of women's roles in the development of Western culture, focusing on women's contributions to literature, theatre, art, religion, political thought, and science. Concurrently, this course examines what it meant to be female in each era of Western civilization	IS
	WST 4930	Topics in Women's Studies	This course explores specific topics or themes in gender/women's studies based on a feminist approach. A variety of topics from different fields of study are offered from an interdisciplinary perspective.	IS
History/ Philosophy of Science	HPS 3320	Screening the Scientific Life: Cinema and the Cultural Image of Science	This course examines how cinema has provided a unique framework for wrestling with the implications of the modern scientific enterprise, examining how easily scientific rationality can be harnessed to both moral and immoral ends and what kind of world that science has produced. By probing a variety of genres - including biography, documentary, historical drama, science fiction, political satire, and horror - this course observes the cinematic and cultural desire to make sense of science. A critical element of the course is diversity in the Western culture through the lens of race, class, gender, and ethnicity.	IS
	MAP 2480	Biocalculus Computer Lab	This computer laboratory applies calculus methods and mathematical programming software to assist students in solving problems from biology, medicine, and psychology.	IS

Mathematics	MAP 4481	Mathematical Modeling in Biology	This course is an introduction to the use of mathematical models in biology. Linear and nonlinear difference and ordinary differential equations, linear stability analysis, phase plane analysis. Applications may include population biology, infectious diseases, chemical kinetics, and physiology.	S
Modern Languages	IFS 3008	Cinema Gone Global	This course focuses on the aesthetic, technological, economic, and philosophical issues that increasingly connect cinemas across the globe and speak to critical changes in the contemporary world on the basis of various cinema traditions today, negotiating between the global and its "discontents."	IS
	IDS 2456	Who is Human? Culture, Gender and Human Rights	This course examines the assumptions underlying arguments about culture, gender and human rights. In particular, students explore, compare, and evaluate fundamental issues in the philosophy of human rights.	S
	IFS 2047	Philosophy and Film	This course uses movies as a vehicle for discussing philosophical issues, such as, the nature of existence, the problem of knowledge, the existence of God, and the rules for proper conduct.	IS
	PHI 2620	Environmental Ethics	An examination of environmental issues past and present, and how they have made an impact upon contemporary society. Also analyzes the historical development of environmental perspectives and the ethical theories that have been generated by these approaches.	S
	PHI 2630	Ethical Issues and Life Choices	This course draws on ethical theories to explore the major ethical issues that one faces as one makes decisions about the kinds of activities to engage in and the kind of life to lead. Issues such as those involving life and death (e.g., abortion, euthanasia, animal rights) and social justice (e.g. discrimination, responsibility to future generations) are examined.	S
	PHI 2635	Bioethics	This course is an examination of the philosophical foundations of bioethical theory and an exploration of the trenchant issues in contemporary bioethics with a concentration on discussions of race, gender, and vulnerable populations (e.g. the poor, immigrants). The course employs tools of ethical theory, philosophical analysis, and analytic writing to examine a number of moral issues arising in health care including justice in health care, experimentation and research on human subjects, reproductive technology, aging, organ donation, and euthanasia. Throughout the course we examine assumptions about rights, persons, and ethical principles at work in medical decisions.	S

Philosophy

PHI 3670	Ethical Theory	This course studies the nature of morality and moral reasoning through critical analyses of the writings of classical and contemporary ethical theorists directed to answering the questions, "What is good?" and "What ought I to do?".	IS
PHM 2121	Philosophy of Race, Class, and Gender	In this course students study selected contemporary philosophical, literary, and journalistic discussions of questions regarding race, class, and gender with a particular emphasis on the status of these discussions in the United States. Students also survey theoretical accounts of the concepts of race, class, and gender, as well as their interrelatedness, and examine their application to various contemporary social issues.	IS
PHM 2300	Introduction to Political Philosophy	This course introduces students to the main issues in political philosophy: the justification of political authority, role of law, political obligation, neocolonialism, disobedience, revolution, rights, the appropriate ends of government, patterns of distribution and justice.	IS
PHM 3123	Philosophy of Feminism	This course is a comprehensive survey of the most important schools of thought and issues in feminist philosophy, with emphasis on feminist politics and ethics. Liberal, socialist, Marxist, and radical feminism and their differing views about equality and subjection are discussed. Criticisms of now traditional theories from women of color and of "difference" theorists are analyzed. Also considered are problems of particular concern to feminists: the family, sexuality, occupational freedom, harassment, rape, pornography, and domestic violence.	IS
PHM 3351	Philosophy of Human Rights	This course is a survey of philosophical discussions of human rights and the moral and political questions arising from their violations. We examine the philosophical foundations for human rights claims, as well as women's human rights, political evil and mass atrocities. We analyze questions of justice and forgiveness in the context of social healing and democratization.	IS
PHM 3400	Philosophy of Law	This course is a comprehensive survey of the most important schools of thought, traditional problems, and current issues in Anglo-American philosophy of law. Chief theories discussed are natural law, positivism, realism (including the law and economics movement), and critical legal studies (including race and gender theory). Also explored are different views about the interpretation of law and the role of the judiciary in American politics. Includes analysis of legal cases and consideration of issues such as justice, equality, liberty, privacy, and punishment.	IS

PHY 1020	Physics and Technology for Future Presidents	This course is for non-science majors and contains the essential physics students need in order to understand today's core science and technology issues, and to become the next generation of world leaders. The course empowers students possessing any level of scientific background with the tools they need to make informed decisions and to argue their views persuasively <del>with anyone, expert or otherwise.</del>	IS
PHY 1020L	Physics and Technology for Future Presidents Laboratory	This course is designed to accompany the PHY 1020 lecture course.	IS
PHY 1921r	WIMSE Colloquium	This course is a colloquium for the Women in Math, Science and Engineering Living-Learning Community.	S
PHY 2048C	General Physics A	This course is designed to provide students with an understanding of how and why things move. Topics covered include kinematics, forces, energy, <del>momentum, oscillations, and thermodynamics.</del>	IS
PHY 2048L	General Physics Lab	This lab is designed to provide students with an understanding of how and why things move. Topics covered include kinematics, forces, energy, momentum, <del>oscillations, and thermodynamics.</del>	IS
PHY 2049C	General Physics B	This course is a calculus-based introduction to electricity, magnetism, and optics for physical science majors.	IS
PHY 2049L	General Physics B Laboratory	This lab is a calculus-based introduction to electricity, magnetism, and optics for physical science majors.	IS
PHY 2053C	College Physics A	This course is the first semester of a two-semester sequence for life-sciences students and is intended to provide a general knowledge of the basic concepts of physics relating to mechanics, energy, gravity, rotational motion, fluids, heat, thermodynamics, vibrations and waves. Physics is based on problem solving and this class involves both solving word problems and performing laboratory <del>exercises.</del>	IS
PHY 2053L	College Physics A Laboratory	This lab is the first semester of a two-semester sequence for life-sciences students and is intended to provide a general knowledge of the basic concepts of physics relating to mechanics, energy, gravity, rotational motion, fluids, heat, thermodynamics, vibrations and waves. Physics is based on problem solving and this class involves both solving word problems and performing laboratory <del>exercises.</del>	IS
PHY 2054C	College Physics B	This course is an introduction to electromagnetism, light, and modern physics for non-physical science majors.	IS
PHY 2054L	College Physics B Laboratory	This lab is an introduction to electromagnetism, light, and modern physics for non-physical science majors.	IS
PHY 3101	Intermediate Modern Physics	This course focuses on special relativity, quantum properties of light and matter, and origins of the universe.	IS

## Physics

PHY 3221	Mechanics I	This course focuses on Newtonian mechanics of a single particle, oscillations, nonlinear oscillations and chaos, gravitation, central force motion, systems of particles, and motion in noninertial reference frames.	IS
PHY 3802L	Intermediate Laboratory	This course focuses on experiments in optics, modern physics and electricity and magnetism. The emphasis is on the development of experimental technique, assessment of the validity of experimental data, and the development of skill in the written presentation of results.	IS
PHY 4222	Mechanics II	This course focuses on Lagrangian dynamics, Hamiltonian dynamics, dynamics of rigid bodies, coupled oscillations, waves in one-dimensional continuous systems, and special relativity.	IS
PHY 4323	Electricity and Magnetism I	This course focuses on electric fields for static charge distributions, electric fields in matter, magnetic fields for constant current configurations, magnetic fields in matter, and Maxwell's equations.	IS
PHY 4324	Electricity and Magnetism II	This course focuses on electromagnetic wave solutions to Maxwell's equations; reflection, transmission, dispersion, and absorption of electromagnetic waves; scalar and vector potentials; electromagnetic dipole radiation; electrodynamics; and relativity.	IS
PHY 4513	Thermal and Statistical Physics	This course studies the fundamental laws of thermodynamics and their application to simple systems. The kinetic theory of an ideal gas. An introduction to the classical and quantum statistical mechanics of weakly interacting systems.	IS
PHY 4604	Quantum Theory of Matter A	This course focuses on quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter.	IS
PHY 4605	Quantum Theory of Matter B	This course focuses on quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter.	IS
PHY 4822L	Advanced Laboratory	This course consists of experiments in atomic physics, nuclear physics, and other areas of modern physics. Students are expected to work without detailed instructions.	IS
PHZ 3400	Phenomena in Condensed Matter Physics	This course covers topics such as: crystal structures, phonons and thermal properties, electron energy bands, metals, semiconductors, superconductors, and magnetism.	IS
PHZ 4316	Nuclear Astrophysics	This course is an introduction to the role of nuclear reactions and decays in astrophysics. Topics cover the origin of elements in the context of Big Bang, major burning stages in the life of a star, stellar explosions, and processes in interstellar matter.	IS
PHZ 4390	Particle and Nuclear Physics	This course examines the properties of nuclei and particles, nuclear and particle decays, the Standard Model, and accelerator and detector techniques.	IS

	PHZ 4601	Special and General Relativity	This course examines the special theory of relativity, tensor analysis and curvature, general theory of relativity, experimental tests, black holes, gravitational radiation, and cosmology.	IS
	PHZ 4702	Biomedical Physics I	This course is the first in a series of two introductory courses on the applications of physics in biology and medicine. The course discusses applications of classical mechanics, hydrodynamics, and thermodynamics to motion, to the structure of the musculoskeletal, respiratory, and circulatory systems, as well as to the biology of the cell.	IS
	PHZ 4703	Biomedical Physics II	This course is the second in a series of two introductory courses on the applications of electricity, magnetism, optics, and modern physics to the nervous system, to vision, to modern topics in biomolecular research, as well as to microscopy and to modern biomedical imaging techniques.	IS
Psychology	IDS 2651	Language, Body, Mind and World	This course provides an examination of language from biological, psychological, and social perspectives, and considers ways that our knowledge of language can be deployed to tackle real-world issues in areas such as health, law, and education.	S
	SOP 3004	Social Psychology	This course involves scientific study of how people think about, influence, and relate to one another. Subjects include individual, cultural, behavioral, and biological levels of analysis.	IS
Statistics	STA 2171	Statistics For Biology	This course provides an introduction to statistics emphasizing applications to biology. Topics include: descriptive statistics, elementary probability, the binomial and nomial distributions, confidence intervals and hypothesis tests for means and proportions, correlation and regression, contingency tables and goodness-of-fit tests as well as analysis of variance.	IS
	STA 3032	Applied Statistics for Engineers and Scientists	This course covers calculus-based probability, discrete and continuous random variables, joint distributions, sampling distributions, and the central limit theorem. Topics include descriptive statistics, interval estimates and hypothesis tests, ANOVA, correlation, simple and multiple regression, analysis of categorical data, and statistical quality control.	IS
	STA 4173	Fundamentals of Biostatistics	This course introduces students to the statistical methods used to design and analyze studies of the occurrence of disease in human populations.	IS

Business	Management	ENT 2630	The Themed Experience	This course provides a broad overview of the creation and concepts that drive the themed experience. Students discuss historical themed spaces and current industry trends in retail venues, theme parks to formal gardens, installation art and theatrical venues. Students gain understanding of storytelling through <u>designed placemaking</u> .	IS
		IDS 2129	When Culture and Business Collide: Communication in an International Context	In this course, students engage in critical and creative thinking about contemporary problems and solutions in intercultural business communication. Students also grapple with these issues in both an international and domestic <u>context</u> .	S
		IDS 2165	Intercultural Communication, Business, and Sustainability: Writing for 'Green' Everywhere	This course examines the intersections between communication, business, intercultural business, sustainability, social responsibility, ethics, and professional leadership. One facet of the course explores the communication issues and challenges that managers of businesses and other organizations face. Additionally, the course discusses sustainability issues through the lens of Permaculture and Transition Town philosophies, tackling topics such as "peak oil," permaculture design, local and alternative currencies, and the "triple bottom line" ideal; these topics are also examined via a global perspective.	S
		MAN 4701	Business and Society	This course is an examination of current and future issues in business and society with emphasis on the social responsibility of business and future <u>challenges for business in a pluralistic society</u> .	S
	Marketing		Consumer Behavior	This course acquaints the student with the fundamental theories from the behavioral sciences as applied to the consumer decision making process.	IS
	Risk Management & Insurance	BUL 3310	The Legal and Ethical Environment of Business	This course offers an introduction to the legal setting in which business operates. Emphasis is on public and regulatory law and on the social, political, and ethical aspects of legal issues in business. Subjects include the nature of law and legal process, administrative law, business and the Constitution, statutory and common law, and related topics.	S
		RMI 2302	Risk in Business and Society	This course is designed to enhance student understanding of risk and its implications for individuals, business, and society. The course focuses on the impact of uncertainty on decisions and the risk-reward tradeoff. Students analyze the implications of risk in a variety of settings.	S
			ADV 3410	Hispanic Marketing Communication	This course prepares undergraduate students to become educated decision makers and consumers of information regarding U.S. Hispanic marketing <u>communication issues</u> .



Communication & Information

Communication

ADV 4800	Creative Strategy II	This course fosters creative and empathetic skills necessary in communicating via print and electronic media and enables students to utilize these skills in <u>creating integrated advertising campaigns.</u>	IS
COM 3332	New Communication Technology and Contemporary Society	This course relates the development and the use of new communication technologies to a variety of issues, such as social, economic, health, and policy implications.	S
COM 3420	Media, Culture, and the Environment	This course examines the role of language and representation in our understanding of the natural world. The course examines news media coverage of environmental issues, environmental images in popular culture, as well as the communication strategies of environmental organizations.	S
COM 4560	Social Marketing	This course is an overview and application of social marketing principles and campaigns. The course is designed to familiarize students with current theory and knowledge in the field of social marketing and to provide students experience with planning a social marketing campaign.	IS
IFS 2021	Social Responsibility (Rhetorically Speaking)	This course is for students living in the social justice living learning community. It acquaints students with the principles of communication and the role it plays <u>in social justice movements.</u>	IS
IFS 2052	Global Perspectives: Communication	This course introduces students to the basic processes of intercultural communication from a global perspective in hopes of increasing their curiosity <u>and acceptance of other cultures.</u>	IS
MMC 2000	Introduction to the Mass Media	This course covers a historical and social overview of the mass media and their relationship to the mass communication process in a modern society.	IS
MMC 3703	Media, Sports, and Society	This course introduces students to various aspects of the sports-media relationship, including the history of, the industries that constitute, the audiences drawn to, and the social issues that arise from the relationship.	IS
MMC 4203	Media Ethics	This course surveys the ethical principles, standards, and problems in the <u>practice of journalism, advertising, and/or public relations.</u>	IS
MMC 4300	Diffusion of Innovations	This course is an analysis of the process of change, particularly from the standpoint of how communication is used in the introduction, spread, and adoption of new ideas, behaviors, and products within a society.	IS
MMC 4602	Mass Media and Society	This course is an analysis of the effects of mass media on public opinion and behavior. A review of social science research exploring the impact of TV on children and others.	IS

		MMC 4641	Political Economy of Media	This course covers the structure and functions of U.S. and other mass-communication systems as well as their relationship to the political and economic systems.	S
		SPC 4710	Interracial/Intercultural Communication	This course helps students gain knowledge of the theory and process of interracial/intercultural communication.	IS
		SPC 4711	Gender and Communication	This course is designed to help students gain knowledge of the theory and process of gender communication (about and between genders) from an interpersonal context perspective.	IS
		ADV 4800	Creative Strategy II	This course fosters creative and empathetic skills necessary in communicating via print and electronic media and enables students to utilize these skills in creating integrated advertising campaigns.	IS
		COM 3120	Communication for Organizing	This course focuses on communication and group problem solving in bureaucracies.	IS
		COM 4431	Rhetoric of a Global Corporation	This course provides opportunities to observe ways in which religious and musical rhetoric are employed by a major U.S. corporation with a global target market. The course emphasizes observation research that focuses primarily on communication theory and methods.	IS
	Communication Science & Disorders	ASL 2510	Deaf Culture	This course acquaints students with the political, cultural, educational, and social parameters of Deaf Culture. International and United States perspectives are included.	IS
Criminal Justice		CCJ 3673	The Social Reality of Black Males	This course critically examines different viewpoints and non-reconciled positions about the current economic, social and political status of Black males in America. The relationship between stereotypical images and the complicated search among Black males for identity and manhood will also be explored.	IS
		CCJ 4662	Minorities, Crime, and Social Policy	This course examines the involvement of minorities, especially African-Americans, in crime and in the criminal justice system. Special attention is paid to the role of racism in theories of crime and in American law and to the treatment of minorities by the various components of the criminal justice system. May require community service hours.	IS
		CCJ 4663	Women, Crime, and Justice	This course provides a flexible forum for the study and discussion of female crime and delinquency and gender issues in the criminal justice system.	IS
		CJJ 4010	Juvenile Justice	This course provides an examination of juvenile delinquency and juvenile justice, including legal and social history, definition and explanation of delinquency, and assessment of delinquency prevention and correctional programs, with emphasis on application of philosophical, legal, and procedural principles to problems and cases of juvenile justice.	IS

Criminology & Crim	Criminology	CJL 4038	Law, Society, and the Administration of Justice	This course examines how law shapes and is shaped by economic relations, morality, social solidarity, state institutions, political domination, democratic governance, and legal consciousness, and how law impacts and is influenced by race, gender, and class relations. The course explores how social groups use law and legal ideology to press their rights to remedy social inequalities and to what extent these groups are successful. Students become familiar with major theoretical traditions in law and society as well as sociological issues such as civil rights, the legislation of morality, and the administration of justice.	IS	
		CJL 4064	Individual Rights and the Criminal Justice System	This course offers an examination of the full range of rights in criminal justice, dealing with them not only in broad philosophical and social terms but also in terms of specific instances, including the rights of the accused and extending to the rights of convicts, witnesses, victims, probationers, ex-convicts, officials, journalists, and the more generalized rights of participation by interest group advocates, taxpayers, and citizens in criminal justice policy and administration.	IS	
		CJL 4565	Courts and Social Policy	This course examines the role of courts in determining social policy as it relates to criminology. Emphasis is directed toward the political and social inputs that influence judicial decision making and the role of democracy and punishment in the courts. These topics are examined using current social policy. The course satisfies oral competency requirements.	IS	
			HFT 2060	Coffee, Tea and International Culture	This course is an introduction to coffees and teas of the world with a focus upon their importance to global cultures found in many regions. Students learn about these beverages and their unique interrelationship with their regional culture, heritage, and environment. Each beverage focuses upon specific regions of the world.	IS
			HFT 2063	Distilled Spirits and International Culture	This course is an introduction to distilled spirits of the world with a focus upon their importance to global cultures found in many regions. Students learn about these regionally distilled beverages and their interrelationship with their culture, heritage, and environment. The course presents distilled spirits from various regions and countries of the world representing the USA, Canada, South and Central America, Asia, Europe, Africa and the Middle East, among others.	IS

Dedman School of Hospitality	Hospitality Management	HFT 2716	International Travel and Culture	This course introduces students to contemporary tourism through a geographical and multicultural perspective of worldwide travel. The course emphasizes the most popular travel destinations and provides information about the physical and cultural characteristics of major cities, states, and countries. The course offers basic facts about travel destinations, the environment , and the people of many regions around the world, and it presents the nature of cultural diversity reflecting both Western and non-Western cultures with special emphasis on ethnic background, race, religion, values, tradition, language, material goods, and inter-relationships among local	IS
		HFT 2890	International Food and Culture	The course is designed to explore the world’s cuisines with a focus on the history of culinary arts, indigenous ingredients, customs, protocol, celebrations, religions, and various cooking methods and terminology.	IS
		HFT 3700	Tourism Management and the Environment	This course focuses on tourism management, organization, and development. Emphasis on economic and environmental issues confronting the industry such as balancing use and preservation.	S
		HFT 4104	Global Impacts and Sustainability in the Club Industry	This course is designed to provide the student with an in-depth understanding and appreciation for sustainable business practices within the private club and golf resort industry. Focus is placed on how existing companies operate within the sustainability model. Students are expected to generate discussions and ideas on how the industry will impact local, regional, and global communities in the future. Case studies are utilized to provide students with real world examples of current practices.	S
		EDF 2082	Introduction to International Development in Education	This course constitutes a basic overview of international development work in the education sector in societies of Asia, Africa, the Middle East and Latin America. The course explores different approaches to international development and how these shape and influence educational improvement initiatives in countries of the Global South	IS
		LDR 2101	Leadership Theory and Practice	This course is designed to inspire, teach, and engage students in the process of learning leadership. The course introduces students to leadership theory and helps them understand their unique role in leadership on campus, in their academic discipline, and within our larger society.	IS
		LDR 2116	Leadership in the Digital Age	This course focuses on addressing leadership in the 21st century in the face of emerging technology, social media communication platforms and global change. The course also introduces leadership online through the lens of positive social change. Using the social change model, students are challenged to take their activity to better their local and global communities.	IS

LDR 2160	Peer Leadership	This course develops potential campus student leaders and improves overall peer leadership efficacy. This course also provides an opportunity for students who are preparing for campus leadership and mentoring roles.	IS
LDR 2162	Leadership in Groups and Communities	This course is designed to inspire, teach, and engage students in the process of learning leadership within the context of working with groups and communities. This course helps students develop the skills necessary in order to be effective in the leadership process and to practice these skills within their community. The course is highly interactive, with student participation and outside class involvement as critical components to the learning process.	IS
LDR 2190	Emotionally Intelligent Leadership	This course is a theory-to-practice course focusing on the role of emotional intelligence (EI) in leadership knowledge, skills, and development. Students are introduced to Emotionally Intelligent Leadership (EIL) theory and consider the role of EI in the context of individual and team leadership development.	IS
LDR 2210	Leadership Through Intergroup Dialogue	This course enables students to explore different aspects of their identities in reference to power and privilege, and how that influences leadership.	IS
LDR 2213	Leadership for Social Justice	This course introduces students to theoretical frameworks in the field of social justice. Through these theories, the notions of privilege, oppression, power and difference are explored. Attention is given to specific social justice issues related to gender, sexual orientation, race, religion, ability, age, and class. Students examine social justice in the context of leadership and come to understand their unique role in creating social change on campus, in their academic discipline, and within our larger society.	IS
LDR 2218	Leadership and Well-being	This course is an interactive, dynamic, theory-to-practice course focusing on learning leadership and well-being theory; acquiring leadership knowledge, skills, and values; attaining personal and community health knowledge, skills, and values; and integrating leadership and wellness values to understand community and civic health concepts.	IS

## Education

Educational Leadership	LDR 2231	Global Leadership	This course helps students develop the skills necessary to interact globally whether at home or abroad. It leads students to develop a sense of curiosity for diverse cultures and understanding the various behaviors, attitudes, and emotions which are found globally and impact our daily lives. The knowledge gained about global leadership allows students to recognize and respect cultural differences and be able to maneuver situations more accurately as well as gain insight and understanding of recent world leaders.	IS
	LDR 2241	Black Male Leadership	This course introduces the study of leadership and leadership efficacy as it relates to Black males, using text and outside readings, activities, and a variety of assignments. Students in this course are introduced to and discuss some of the social, psychological, and cognitive realities of Black males in America.	IS
	LDR 2242	Gender and Leadership	This course is an exploration of the intersections of the complex social construct of gender and the intricacies of enacting leadership. This course considers the experiences of women, trans*, genderqueer, and men leaders as well as concepts of gender expression and the intersectionality of identities as influencers on leadership access and practice.	IS
	LDR 2243	Latinx Leadership Development	This course is a theory-to-practice, interactive and identity-based leadership course discussing and analyzing components of Latinx Leadership Development. This course explores the historical and cultural aspects of Latinx culture and how it intertwines with leadership development, learning, and practice.	IS
	LDR 2290	Leadership & Sustainability in Action	This course is designed to introduce students to the concept of leadership and action related to sustainability. It looks at the interconnectedness and complexity of the three pillars of sustainability (environment, economic, and social) as well as discusses the development of the leadership skills needed to create social change. In conjunction with class discussions and readings, students develop a personal sustainability plan to help align passion and values into active practice.	S
	LDR 2325	Leadership and Empowerment	The course includes critical conversation about leadership literature, theory, and class discussions that will provide a foundation for new perspectives of leadership, with the focus on follower empowerment.	IS
	LDR 3215	Leadership and Change	This advanced undergraduate leadership course examines the change process and prepares leaders who are effective in working with individuals, groups, and organizations in leading and managing change. This is an interactive theory-to-practice course, focused on leadership as a change process.	IS

	LDR 3263	Leadership Experience	This experiential-based course offers participants an opportunity to put into practice the knowledge, theory, and skills they have learned in previous courses in the Certification program. Students select and create an experience, complete an experiential learning contract for the course, and do extensive reflection on their experience throughout the course.	IS
	LDR 4105	Leadership and Complexity	This final course in the Certificate in Leadership Studies builds upon the leadership literature, theory and experience foundation created in the previous certificate courses. This course provides opportunities for analysis of student's experiential opportunity, advanced theory to practice work, and development of personal leadership theory and integrated learning plan.	IS
Sports Management	SPM 4013	Cross-Cultural Sport	This course approaches sport through a variety of global perspectives and cultural lenses. Students are exposed to different national contexts, histories, leagues, and governing bodies, as well as the social, cultural, political, and economic imperatives organizing sport and its management, including global mega-events (e.g., Olympics, World Cup) and national structures (e.g., Barclay's Premier League).	IS
	SPM 4025	Diversity in Sport	This course examines the role and impact that ethnicity, racism, gender, and other diversity topics have had on sport, while providing students with an opportunity to develop an understanding and appreciation for diversity in sport.	IS
	EDF 1005	Introduction to Education	This course offers students a broad view of education from historical, cultural, psychological, political, social, and philosophical perspectives.	IS
	EDF 2085	Teaching Diverse Populations	This course examines the complexity of the full range of human groupings and cultural perspectives, as well as the complex relationships among them. Students gain self-understanding in becoming culturally conscious participants in the global community through examining the differences between individuals and peoples, comparing cultures within the global community, and investigating diversity within Florida populations in general and school community populations in particular.	IS
	SCE 4891	Introduction to the Nature of Science and Scientific Inquiry for Elementary Teachers	This course is designed for elementary education majors. The course is an introduction to the science process skills, inquiry skills, and a 21st century view of the nature of science within the context of science content.	IS

Teacher Education	SMT 4301	Classroom Interactions (FSU-Teach)	This course explores the role of content, pedagogy, curriculum, and technology in promoting learning and impacting equity. Topics cover discourse in the classroom, diversity, equity, and classroom learning opportunities as well as assessment methods for understanding student learning.	IS
	SMT 4664	Project Based Instruction (FSU-Teach)	This course integrates the major themes in the FSU-Teach program: infusion of technology in representation, analysis, modeling, assessment, and contextualization of the content; field-based experiences; as well as equity in an intellectually challenging culminating experience before students start teaching.	IS
	SSE 4194	Developing a Global Perspective	This course examines theory and practice in global education and the integration of global perspectives into curriculum and pedagogy in social sciences and social studies education. The course also evaluates major issues and controversies embedded in the field, and enables students to critique scholarship, analyze controversies, and propose ideas for integrating global perspectives in curriculum and instruction.	IS
	TSL 4520	Cross-cultural Communication for Foreign/Second Language Teachers	This course provides teacher candidates with information related to cross cultural communication to prepare them to work with linguistically and culturally diverse learners in K-12 settings. Students explore the relationships between language and culture and focus on methods for fostering understanding between different cultural and subcultural groups.	IS
	BME 3009	Introduction to Biomedical Engineering	This course presents an introduction to the field of biomedical engineering, building on previous basic coursework in biological science, physics, and calculus. Topics in cell physiology and modeling, bioinstrumentation, biomaterials, tissue engineering, and bioimaging are covered. The course provides sophomore-level biomedical engineering students with both fundamentals and applications in contemporary biomedical science and engineering.	IS
	BME 4007	Biomedical Engineering	This course introduces the major principles of the life sciences (microbiology, cell biology, and genetics) that are important for biomedical engineering applications. The application of the chemical engineering principles of kinetics, mass transport, bioreactor design, and separation processes to solve the important problems in the biomedical engineering are emphasized.	IS
	ECH 3023	Mass and Energy Balances I	This course covers mass and energy balances related to chemical process systems and measurements, as well as to the development of problem-solving methodologies in mass and energy balances.	IS



Chemical &  
Biomedical

ECH 3024	Mass and Energy Balances II	This course introduces the general concepts of chemical engineering. In this course, the applications of mass and energy balances are extended to include reactive systems, and systems undergoing phase changes as well as transient processes.	IS
ECH 3101	Chemical Engineering Thermodynamics	In this course, students learn the basics of classical and solution thermodynamics. The course forms the link between the mass and energy balance courses, and separations.	IS
ECH 3418	Separation Processes	selection and analysis of techniques for chemical separation	IS
ECH 4743	Bioengineering	This course introduces chemical engineering students to the major principles of life sciences that are important for biotechnological applications, and extends and applies the students' knowledge of the chemical engineering principles of kinetics, mass transfer, separation, purification, and characterization to important problems in bioprocess engineering.	IS
ECH 4781	Chemical Engineering-Environmental	This course is an introduction to applications of environmental engineering from a chemical engineering perspective. Thermodynamics, stoichiometry, chemical kinetics, transport phenomena, and physical chemistry are utilized in addressing pollution control and prevention processes. Analysis of particle phenomena, including aerosols and colloids. Applications of fundamentals to analyze gas and liquid waste treatment processes.	IS
ECH 4824	Chemical Engineering Materials	This course provides an introduction to engineering materials, with emphasis on understanding the relation between structure, processing, and properties. In particular, the role of the atomic structure and arrangement, as well as the microstructure, in determining the physical properties of these materials is examined. In addition, polymers and modern processing techniques for improving material performance are studied. Finally, the resistance of materials to environmental factors, and factors in selection of materials for engineering applications are discussed.	IS
CCE 3101	Construction Materials	This course covers properties and characteristics of construction materials for civil and highway engineering; metals, aggregates, cements, timber, concrete, and asphalt.	IS
CCE 4004	Construction Engineering	This course covers theories, principles, and applications of construction engineering and management. Emphasis is placed on construction preplanning, delivery systems, contracts and bidding, estimation, scheduling, project control, and professional issues.	IS

CEG 2202	Introduction to Geomatics Engineering	This course explores methods and procedures of surface mapping and subsurface sectioning including distance measurements, traverse computations and topographic mapping, and Global Positioning Systems. Use of field equipment and procedures to measure distances, elevations, angles, and <u>perform complete surveys</u> .	IS
CEG 2202L	Introduction to Geomatics Engineering Lab	This course explores methods and procedures of surface mapping and subsurface sectioning including distance measurements, traverse computations and topographic mapping, and Global Positioning Systems. Use of field equipment and procedures to measure distances, elevations, angles, and perform complete surveys. Computer Aided Design (CAD) Laboratory for basic <u>engineering drafting</u> .	IS
CEG 3011	Soil Mechanics	This course covers physical, index, hydraulic, and mechanical properties of soils. Topics include classification, compaction, stress distribution, permeability and seepage, consolidation settlement, and shear strength of soil.	IS
CEG 4701	Environmental Geotechnics	This course covers the geotechnical aspects of waste containment and storage. Aspects of design, construction, and performance of earthen structures for storing or disposing waste of remediation contaminated sites.	IS
CEG 4801	Geotechnical Design	This course covers geotechnical investigation, analysis, and design of different geotechnical structures, including earth retaining structures, slopes and embankments, earthwork with geosynthetics, as well as shallow foundations.	IS
CES 3100	Structural Analysis	This course covers loads, load paths, as well as advanced topics on shear and bending moment, including frames and superposition. Additional topics include influence lines, deflection of determinate structures, as well as indeterminate analysis methods including flexibility, slope-deflection, moment distribution, and stiffness methods.	IS
CES 4605	Steel Design	This course covers the design of tension, compression, and flexural steel members. The course also covers the design of bolted and welded connections <u>for steel members, according to AISC specifications.</u>	IS
CES 4702	Concrete Design	This course covers the design of reinforced concrete structures using current ACI specifications and building codes. Topics include flexural design of reinforced concrete beams, flanged beams, and one-way slabs. The course also presents column design, shear reinforcement design, bond and anchorage, and <u>control of deflections and cracks</u> .	IS

CGN 3508L	Civil Engineering Materials Laboratory	This course is a study of the principal construction materials used in civil engineering practice (soils, concrete, timber, steel, etc.) with special attention to measuring mechanical properties through laboratory testing according to ASTM standards. Hands-on experience in conducting tests, including preparation and instrumentation of test specimens, test execution, data acquisition, and interpretation of test results using statistical analysis.	IS
CGN 4800	Pre-Senior Design and Professional Issues	This course covers issues relevant to the design and construction of engineering projects; professional ethics; project planning and scheduling; design under engineering and societal constraints; importance of licensure and continuing education; as well as oral and written communication issues. Inter- or multidisciplinary teams prepare formal proposals addressing engineering challenges.	IS
CGN 4802	Senior Design Project	This course is a capstone senior-level design course integrating the knowledge and skills gained in undergraduate studies in civil and environmental engineering. The course involves the completion of a team-based interdisciplinary design project covering several sub-disciplines in civil or environmental engineering. Industry and professional participation.	IS
CGN 4930r	Special Topics	This course covers topics in civil and environmental engineering, with an emphasis on recent developments. Topics and credit may vary.	IS
CWR 3200L	Environmental and Hydraulic Engineering Lab	This course is a hands-on introduction to environmental and hydraulic engineering topics. Physical experiments that demonstrate fundamental concepts such as hydrostatics, pipe flow, open channel flow, water quality, and water treatment processes are performed.	IS
CWR 3201	Hydraulics	This course covers fundamental concepts of fluid properties, hydrostatics, kinematics, ideal flow viscous effects, transport phenomena; drag, laminar, and turbulent flow in pipes and channels; and dimensional analysis.	IS
CWR 4101	Engineering Hydrology	This course covers the processes of the hydrologic cycle, hydrologic analyses for the planning and design of water management systems, and the use of application program packages.	IS
CWR 4120	Groundwater Hydrology	This course examines the fundamentals of groundwater flow and contaminant transport. Topics include Darcy's law, flow nets, mass conservation, heterogeneity and anisotropy, storage properties, 3-D equation of groundwater flow, regional circulation, unsaturated flow, recharge, stream-aquifer interaction, well hydraulics, slug test analyses, and contaminant transport processes.	IS

Eng

Civil &  
Environmental

CWR 4202	Hydraulic Engineering I	This course covers principles of hydrology and hydraulics as they apply to the design of water supply, urban drainage, flood control, and hydraulic energy-conversion systems. Students use computer-aided design to devise hydraulics systems.	IS
CWR 4203	Hydraulic Engineering II	This course covers methods for analyzing a broad range of unsteady flow conditions and for designing facilities to cope with resulting problems. Based on these methods, students learn to apply computer programs to practical water distribution and open-channel systems.	IS
CWR 4540	Water Resources Engineering	This course offers a systems approach to complex water resources problems as well as a systems analysis of water resources operations, design, and planning.	IS
CWR 4822	Coastal and Estuarine Hydraulics	This course covers coastal hydraulic principles and waves in estuaries and coastal oceans, wave properties and wave forces on coastal structures, tidal motions, mixing and transport in estuaries, and coastal -engineering analysis.	IS
EES 3040	Introduction to Environmental Engineering	This course is a broad introduction to environmental engineering topics. Includes fundamental concepts in mass balance, water quality, water and wastewater treatment, air quality, and solid/hazardous waste management, with considerations to environmental and societal impacts, as well as technical limitations. This course serves as the foundation for all other environmental engineering courses.	S
EGN 1004L	First Year Engineering Laboratory	This laboratory includes an emphasis on student time management, a variety of products and processes, and computer-aided problem solving. Product/process involves sketching and drawing pertinent diagrams by hand, and learning the history and engineering concepts involved.	IS
EGN 3331	Strength of Materials	This course covers axial, torsional, and flexural stresses and strains, as well as normal and shear stress. Topics include Mohr's circle, transformation of stress, safety factors, and engineering applications.	IS
ENV 4001	Environmental Engineering	This course covers the design of water and wastewater treatment plants, wastewater collection systems, air and water pollution control, as well as solid waste management and contemporary environmental issues.	IS
ENV 4022	Remediation Engineering	This course reviews various innovative remediation technologies used for cleanup of contaminated soil and groundwater at a site such as air sparging, soil vapor extraction, reactive walls, reactive zones, stabilization technologies, as well as hydraulic and pneumatic fracturing pump-and-treat systems.	IS

ENV 4031	Applied Environmental Engineering Microbiology	This course surveys environmentally important microbes and their roles in the environmental restoration processes. Major topics include basics of microbiology, stoichiometry and bacterial energetics; bioremediation and other environmental microbiology applications; as well as detoxification of hazardous chemicals.	IS
ENV 4041	Environmental Systems Analysis	This course covers systems analysis techniques applied to the solution of environmental problems, with particular emphasis on linear and dynamic programming.	IS
ENV 4053	Chemical Fate and Transport in the Environment	This course covers the processes of pollutant transport and transformation in and between air, water, and soil or sediments. Topics include advection, dispersion, diffusion, sorption, degradation, and phase-change processes.	IS
ENV 4341	Solid and Hazardous Waste Engineering	This course covers definitions and characteristics of solid and hazardous wastes. Topics include history, growth, and magnitude of the problem; legislative, regulatory, and technical aspects of waste generation, storage, collection, transportation, processing, transformation, and disposal; design of waste minimization and recycling programs; and case studies of waste management.	IS
ENV 4405	Water Reuse Engineering	This course covers sources of water for reuse, treatment processes and systems, monitoring and control instrumentation, health and social aspects, and design of facilities/systems.	IS
ENV 4417	Applied Environmental Engineering Chemistry	This course covers applications of fundamental principles from general, organic and biological chemistry, to major environmental engineering processes. Emphasis is placed on the chemistry of water treatment.	IS
ENV 4500	Environmental Unit Processes and Operations	This course covers the operational and design features of the physical, chemical, thermal, and biological treatments used in engineering for water and wastewater treatment and the management of solid and hazardous waste.	IS
ENV 4561	Design of Water Quality Management Facilities	This course covers analysis of operations, processes, and systems used in the design of facilities for maintaining water supply quality, wastewater control, and aquatic pollution control. Design of small and decentralized wastewater management systems.	IS
ENV 4611	Environmental Impact Analysis	This course covers topics such as analysis of various measures of environmental quality, impact of human activity on water, land, and air resources, and benefit-cost analysis in environmental-impact assessment.	S

	TTE 3004	Transportation Engineering	This course is an introductory study of transportation engineering in the United States with special emphasis on highway and traffic engineering, planning and design, construction, operation, management, and safety.	IS
	TTE 4201	Traffic Engineering	This course covers nature, characteristics, and theories of traffic problems. Topics include traffic survey procedures, origin-destination studies, as well as an introduction to theory and design of automatic control of traffic systems.	IS
	TTE 4804	Highway Geometric Design	This course covers principles and procedures for the geometric design of highways and streets, consideration of traffic, land use, and aesthetic factors.	IS
Electrical & Computer	EEL 3002L	ECE Engineering Tools Lab	This is an introductory laboratory for students entering the electrical and computer engineering programs. The basic topics include: lab safety issues; solving engineering problems using software tools such as MATLAB and Mathematica; electric circuit simulations using c software packages such as Multisim and OrCad; electric circuit design and instrumentation; the proper use of test and measurement equipment.	IS
Industrial	EIN 4394C	Engineering Materials and Manufacturing Processes II	This course is an introduction to engineering materials used in industry from the perspectives of composition, microstructures, properties, and heat treatment, various traditional and non-traditional manufacturing processes, basic mathematical descriptions for selected processes, and the application of these concepts to process selection and planning.	IS
	EML 3002L	Mechanical Engineering Tools Lab	This course covers computer aided design and drafting, programming, machining, and a basic introduction to the mechanical engineering profession and ethics. Course includes building and testing a simple Stirling engine.	IS
	EML 3100	Thermodynamics	This course discusses the fundamentals of thermodynamics. System description, common properties. Properties of pure substances. Mathematical foundations. First and Second Laws of Thermodynamics, closed and open systems. Equations of state and general thermodynamic relations.	IS
Mechanical	EML 4450	Energy Conversion Systems for Sustainability	This course presents the challenge of changing the global energy system so it addresses reducing dependence on finite fossil energy sources and moving to environmentally sustainable energy sources. The emphasis is on greenhouse gas emissions-free energy production strategies, including renewable energy sources such as solar, wind and biomass. Topics include photovoltaic cells, fuel cells, and thermoelectric systems.	S

		EML 4452	Sustainable Power Generation	This course is a continuation of energy-conversion systems for sustainability and focuses on solar electricity, biopower, biofuels, and hydrogen as energy media. The course also explores whether hydrogen-based transportation is a practical option.	S
		EML 4550	Engineering Design Methods	This is a formal lecture component of the mechanical engineering 'capstone' senior design course project. The course covers the product design cycle from problem identification and need assessment, to specification, concept generation and selection, preliminary design, materials selection, and final design. The design process is placed in context by presenting topics such as legal and ethical issues, product reliability and liability considerations, engineering economics, and optimal design.	IS
Fine Arts	Art Education	ARE 4550C	Art Therapy/Special Populations	This course explores definitions of art therapy, the development of the discipline, the exploration of special populations, human relations, and the <u>related concepts in art education and art therapy.</u>	IS
	Dance	DAN 3144	Cultural Perspectives on Dance	This course surveys approaches to the study of global dance perspectives and practices through emphasis on dance as expression of cultural, historical, social and political forces. Issues of tradition and innovation in select dance phenomena are especially explored through readings, discussion, media presentation, embodied experiences, and movement laboratories.	IS
	Interior Design & Architecture	IND 2219	Design and Human Experience	This course focuses on the impact of design on the human experience. It is a gateway experience in which students will explore the nature of design, creativity, and problem-solving. The course will introduce some of the major theories from the design disciplines of interiors, architecture, landscape architecture, and products design, and provide students with an awareness, understanding, and enthusiasm for design and its impact on our lives.	IS
		IND 3431	Lighting Fundamentals	This course explores the advanced technical aspects of interior design with emphasis on lighting, electrical plans, reflected ceiling plans, measurements, <u>and acoustics.</u>	IS
		IND 4601	Design Process II	In this course, students study texts that consider women's roles in society. The course focuses on women's gender roles and legal status during the Victorian period. What kinds of political and literary power did women have? What did <u>women have to say abo</u>	IS
		IND 3627	Sustainable Design	This course gives students a basic introduction to the fundamentals of sustainable design in order to better understand the inter-relationships between the built environment and nature. Review of Sustainable practices in interior design and architecture with emphasis on LEED	S

		IND 4243	Studio 4 Residential Design	A combination of class lectures, discussions and studio lab sessions intended to provide majors with specialized knowledge and skills for residential design. This will include project research, project programming, creative problem solving, space planning, the selection of interior design products, and advanced visual and oral project presentation.	IS
	Theatre	THE 4064	Disability and Representation	This course offers an introduction that surveys the way in which the arts and popular culture (including literature, fine arts, performance, advertising, documentary film, and video) have both reflected and contributed to attitudes in public policy concerning people with disabilities. The course takes a disability-studies approach, which considers the social and cultural aspects of disability.	IS
		THE 4236	A Cultural History of the American Theatre and Drama from Beginnings to Present	This course examines American theatre and drama in its cultural and social contexts.	IS
		THE 4433	Gender, Race and Performance	This course is an advanced introduction to contemporary theories/practices of performance of race/gender on stage and in everyday life.	IS
Human Sciences	Family & Child Sciences	CHD 4615	Public Policy: Child and Family Issues	This course provides an overview of theory and implementation of public policies relating to children and families at the state and federal levels. Students explore ways that families contribute to and are affected by social problems, and how families can be involved in policy solutions. Students learn about roles professionals can play in building and interacting with family policy.	IS
		FAD 4265	Family Diversity	This course is designed to expose students to the diversity of families by race, ethnicity, social class, and structures in an ego-systemic context.	IS
	Nutrition, Food & Exercise Science	FSS 4135	Institutional Food Economics	This course discusses cost analysis, cost containment, organizational structure, food laws, and food and beverage procurement in health care settings.	IS
		HUN 2125	Food and Society	This course examines the impact of society on human food ways, role of food and nutrition in national development and global politics.	S



Jim Moran School of Entrepreneurship	Entrepreneurship	ENT 2802	Entrepreneurship and Contemporary Society	This course explores entrepreneurship in society by understanding how innovation can lead to commerce and how commerce impacts our daily lives. Topics include the process of innovation, the nature of entrepreneurialism, the essence of Problem-Opportunity-Venture-Operations (POVO) model, the lean start-up business model, different kinds of entrepreneurship (commercial, social, scientific and artistic) and an introduction to competencies that have facilitated success in other entrepreneurs.	S
		ENT 3283	Women and Minorities in New Ventures	This course focuses on the emergence and current impact of women- and minority-owned businesses. The course also considers special challenges and opportunities that women and minority entrepreneurs confront. Course may include discussions with successful women and minority business owners.	S
	Retail Entrepreneurship	CTE 3808	Consumers in a Complex Marketplace	This course explores the decision making behavior of consumers in a complex and diverse marketplace, including consumer rights and responsibilities.	IS
		CTE 4829	Global Sourcing	This course covers global trade, trade practice and theories, as well as the <u>global sourcing related to the textile, apparel, and retail industries.</u>	S
	Social Entrepreneurship	ENT 3503	Social Entrepreneurship	Creating new ventures based on social issues in business	S
Medicine	Interdisciplinary Health Science	ISS 4304	Contemporary Social Problems	This course is designed to introduce the benefits and methods of interdisciplinary research and study. This course uses multiple and interrelated perspectives to identify and explore social issues and problems. Students are guided through the process of building interdisciplinary perspectives to maximize cognitive skills, critical thinking and problem solving skills.	IS
Music		IFS 2059	Music and International Human Rights	This course investigates the role music plays worldwide in negotiating, consolidating, and questioning power between powerful macro-reaching political entities (corporations, nation states) and micro-locales ( <u>villages, regions, sub-cultures</u> ).	IS
		MUE 4044	Music Education in the American Society	This course analyzes the interaction of society, culture, and musical behavior with the activities, attitudes, and behaviors in the United States' school <u>systems.</u>	IS
		MUH 2019	Modern Popular Music	This course surveys the development of popular music in America from the early 20th century to the present with a focus on the cultural, social, economic, technological, and political conditions surrounding that music. The course widens student's comprehension of the times, places, cultural contexts, intellectual debates, and economic conditions that foster (or hinder) artistic <u>innovation.</u>	S

N		MUH 2051	Music in World Cultures	This course provides an introductory survey of various musical traditions in a global perspective, exploring music both as a phenomenon of sound and as a phenomenon of culture. Students analyze tradition as a constantly evolving and transformative entity that nurtures and sustains core cultural values. The social context of music, including social structure, geography, globalization, mass mediation, concepts of religion, instruments, aesthetic priorities, and cultural beliefs that inform music within given cultural contexts is emphasized.	S
		MUH 3053	American Roots Music	This course studies the diverse music of North American minority groups, with an emphasis on Native American, African-American, Latin American, Asian, Jewish, and certain Euro-American traditions.	IS
		NSP 3185	Multicultural Factors and Health	This course is a comparative analytical approach to the study of communication, current problems, issues, health care beliefs, values, and practices of different systems and cultural norms as they affect health care practices which conflict with ethnic or cultural communication related to standards and value systems.	IS
		NSP 3685	Grief, Loss and Trauma: Ethnic and Individual Variations	This course explores similarities and differences among cultures when responding to grief and loss. Topics related to diverse populations and grief practices are examined, as well as personal response to grief, loss, and trauma; not exclusively utilizing death as the only example of loss or trauma. The course allows students to expand their reactions to life and death, plan their own funeral, and at the same time focus on family, community, and worldwide populations.	IS
		NUR 3065	Health Assessment, Wellness and Prevention Across the Lifespan	This course introduces the nursing student to concepts and models of wellness and health promotion for individuals, families, and communities. Included are communication and interview techniques in compiling a health history, technical skills in performing a physical exam, clinical reasoning skills in doing a health risk appraisal, formulating nursing diagnoses appropriate to identified problems, and understanding the role of the nurse in patient education. Client's cultural differences, development stage, family structure, economic situation, and health behaviors are considered when evaluating health status. In addition, the role of the nurse in patient education is emphasized.	IS

Nursing

NUR 3065L	Health Assessment, Wellness and Prevention Across the Lifespan Lab	This course provides the application component of NUR 3056. Under the guidance of lab instructors, the student is given opportunities to integrate theoretical knowledge from NUR 3056 in practice sessions using demonstration; low, medium, and high fidelity simulation scenarios; deliberate practice; debriefing; and reflective instructional approaches.	IS
NUR 3177	Holistic and Complementary Approaches to Health and Healing	This course is designed to explore knowledge of practices that promote health and well-being. Emphasis is on stress management and body-mind-spirit communication. A variety of holistic and complementary approaches to health and healing are explored.	IS
NUR 3678	Nursing Care of Vulnerable Populations	This course examines the application of nursing and related theories to the care of vulnerable populations throughout the life cycle. Emphasis is placed on nursing care of the elderly, clients with psychosocial disorders, and at-risk culturally diverse populations in the community. The impact of poverty, environment, support networks, health policy, and community resources on vulnerable populations and health outcomes is explored. The focus is on promoting client independence and maximizing quality of life of vulnerable individuals, families and communities.	S
NUR 3678L	Nursing Care of Vulnerable Populations Lab	This course provides the application component of NUR 3678. Under the guidance of clinical instructors, the student is given opportunities to integrate theoretical knowledge from NUR 3678 in clinical sessions. Emphasis is placed on nursing care of the elderly, clients with psychosocial disorders, and at risk culturally diverse populations in the community. The impact of poverty, environment, support networks, health policy, and community resources on vulnerable populations and health outcomes is explored. The focus is on promoting client's independence and maximizing quality of life of vulnerable individuals, families, and communities.	S
NUR 4667	Population Health in Nursing	This course introduces students to global health, the U.S. healthcare system, the social determinants of health, environmental health, emerging infectious disease, disaster planning and population support during disasters, and other mass casualty situations. In addition, using Healthy People/WHO indicators in evidence based decision making and utilizing the process of community assessment including the tools of epidemiology and biostatistics are reinforced.	S

Administration & Policy	Public Administration	PAD 3003	Public Administration in American Society	This introductory course in public administration studies the management of large-scale government bureaucracies including organization, career systems, and financing. It also focuses on the role of bureaucracies in modern society in the formulation and implementation of public policy.	S
		PAD 3013	Futures Studies	This course applies futures studies perspectives and methods to the study of societal trends and conditions. Emphasis is on the development of anticipatory public policy.	IS
		PAD 3931	Selected Topics in Public Administration	Topics may vary.	IS
		PAD 3941	Public Service Internship	This course consists of participant observation of the administration of policy in public service organizations. Internship with faculty supervision, on-campus seminars, discussion papers. May be repeated to a maximum of six semester hours.	IS
		PAD 4074	Professional Pathways in Emergency Management	This course explores best practices and theories regarding emotional intelligence, communication, behavior and ethics in professional emergency management. Students gain the knowledge and skills necessary to be successful in a professional emergency management setting.	IS
		PAD 4083	Terrorism and Security in Africa	This course provides an in depth look at the nature and evolution of terrorism in Africa. Topics covered will include recruitment, anti-terrorism agencies/initiatives, the ramifications of colonialism on modern day terrorism, the state of security on the continent, gender roles in terrorism, and state sponsored terrorism.	IS
		PAD 4170	Nongovernmental Organizations in Development	This survey course is about international development NGOs. The course presents contemporary perspectives about NGOs, describes how NGOs operate, and introduces the challenges that their managers face and potential solutions for them.	IS
		PAD 4301	Disaster Management Planning for Urban Poor Communities	This course discusses the elements that intensify risk where informal and non-permanent settlement housing is prevalent. Government interventions, especially those involving urban planning and policy are studied and their repercussions to the social, economic and cultural networks of these communities analyzed.	S
		PAD 4380	Disasters: From Shock to Recovery	This course utilizes multiple case studies to examine the complexity of disaster situations in the United States and internationally. The course covers a different disaster case study every week, focusing on event-specific conditions that created/contributed to the disaster, local preparedness, response and recovery in the aftermath of the event.	S

## Public Admi

PAD 4382	Disaster Recovery and Mitigation	This course is designed to provide an overview of recovery and mitigation activities in the post-disaster environment. Focusing on the "Recovery Phase" initially, course materials examine the policy and planning mechanisms involved in short and long term rehabilitation of distressed communities. A similar examination from the "Mitigation Phase" is also made.	IS
PAD 4414	American Public Service	This course studies the structure and political role of the civil service, evolution of government employment, current personnel policies, rights and responsibilities of public servants, and labor management relations. The impact of the public service on American society is explored.	IS
PAD 4833	International and Comparative Disaster Management	This course discusses practical and theoretical issues associated with international disaster management. Risk, hazards, and disasters are addressed from a global perspective with particular emphasis placed on the differences in key issues between developing and developed countries.	S
PAD 4844	Public Health and Emergency Management	This course is designed to provide an overview of international public health events that have either evolved into disasters, or are born of disasters. In addition, this course looks at preventing and preparing for public health disasters. A variety of threats and case studies are reviewed with an evaluation of future threats. Additionally, epidemiology and the discovery and reporting of events are reviewed.	S
PAD 4891	Non-Profits, NGO's and Disaster	This course is designed to introduce students to the fundamental concepts, theories, principles, and practices in emergency management relationships with NGO's and non-profit organizations.	S
PAD 4897	Global Security and Fusion	This course examines how the nations of the world unite for a common cause, outlining geo-political and strategic relationships that serve to streamline and facilitate such relationships, the critical importance of U.S. security and intelligence cooperation with our partners and allies, and how our military supports our civilian authorities in a variety of ways toward this end.	IS
PAD 4936	Business Continuity Private Sector	This course examines the fundamental and unique features of private sector emergency management and business continuity planning. It covers important areas such as risk evaluation, business impact analysis, training, plan maintenance, and the role of business sector recovery in community recovery.	IS

African-American Studies	AFA 1003	Diversity and Justice	This course integrates African authors, pre- and post-Apartheid, to demonstrate the problems of living in a diverse world. It fosters awareness and acceptance of people different from students through the study of the African-American culture, and stimulates an appreciation and respect for people of all cultures.	IS
	AFA 1003	Diversity and Justice	This course integrates African authors, pre- and post-Apartheid, to demonstrate the problems of living in a diverse world. It fosters awareness and acceptance of people different from students through the study of the African-American culture, and stimulates an appreciation and respect for people of all cultures.	IS
	AFA 2000	Introduction to the African-American Experience	This course is an interdisciplinary examination of African-American culture and socio-economic status. This course also explores elements of the African Diaspora.	IS
	AFA 3101	Theory and Dynamics of Racism and Oppression	This course engages theories of race discrimination and oppression as it relates to African Americans. Students systematically and objectively examine the sources of American oppression and explore how it shapes the life chances of African Americans from prior to the Reconstruction Era to the twenty-first century. The course explores the timing and manner of their entry into U.S. society, conflicts with other groups, encounters with prejudice and discrimination, as well as the extent to which they have secured access to cultural, economic, political, and social assimilation into U.S. society.	IS
	ECO 2013	Principles of Macroeconomics	This course explores aggregate economics and national income determination, money and monetary theory, present macroeconomic conditions, and aggregative policy alternatives; theory of international trade and the balance of payments; economic growth and development.	IS
	ECO 2023	Principles of Microeconomics	This course covers consumption, production, and resource allocations considered from a private and social point of view; microeconomic problems and policy alternatives; economics of inequality and poverty; and comparative economic systems.	IS
	ECO 3004	Debating Economic Issues	This course applies economic analysis to current economic policy issues. Topics may include financial markets, Social Security, debt finance, health care, immigration, global climate change and environmental policy, regulation, welfare reform, labor market discrimination, drug policy, and topics selected by students.	S
	ECO 3130	Free to Choose	This course, dealing with liberty and economic freedom, addresses many present and past social issues and public policy decisions.	IS

ECO 3131	Market Ethics	This course examines the vices, virtues, and values of capitalism to evaluate its ethical properties. It is designed to raise questions and clearly-structured issues so that the student can make informed and thoughtful decisions.	IS
ECO 3933	Special Topics in Economics	This course explores special topics of current interest or of benefit from specialties of visiting faculty.	IS
ECO 4400	Games and Decisions	This course is a non-technical introduction to strategic decision-making. Focus on situations involving conflict and cooperation and on decision-making under conditions of uncertainty and ignorance. Applies game theory and decision theory to such topics as bargaining and negotiations, contracting, auctions, and voting	IS
ECP 3113	Economics of Population	This course examines determinants and consequences of world population growth and changes, components of population growth in more- and less-developed countries, population and food supply, nonrenewable resource interrelationships.	S
ECP 3143	Afro-Americans in the American Political Economy	This course examines the market, institutional, governmental, and social processes that have contributed to the economic well-being of African-Americans. Also covers theoretical material related to wage determination, labor market discrimination, and marriage and transitions in family structure, as well as interaction between race and class as determinants of the life chances of African-Americans	IS
ECP 3302	Economics of Natural Resources, Energy, and the Environment	This course focuses on the relationship between natural resource availability and growth, capital theory, economics of the environment, the U.S. energy problem and alternatives for the future, an economic appraisal of U.S. energy policy.	S
ECP 3403	Business Organization and Market Structure	This course is an introduction to the economic analysis of industry, a survey of market structures, oligopoly and collusion, a variety of commercial practices under imperfect competition, the welfare consequences and policy approaches to the problems of monopoly.	IS
ECP 3617	Land Use, Housing and Government Regulation	This course provides the theoretical and institutional machinery for analyzing land, housing and mortgage markets, with special attention given to the intended and unintended effects of government regulation of these markets. Important empirical evidence is also reviewed.	S

## Economics

ECP 4312	The Economics of Energy, the Environment, and Sustainability	This course explores the idea that in addressing public policy issues involving sustainability of the environment and energy systems, engineering is important for obvious reasons, but without consideration of the human factor, engineering solutions will be incomplete. In the course, students are educated on economic models and analysis of sustainability in energy and environmental systems. The frontier of addressing public policy issues involving the sustainability of the environment and energy systems requires a combination of both engineering and social science skills. Engineering is important for obvious reasons; however, without consideration of the human factor, engineering solutions alone will be incomplete at best and failures at worst.	S
ECP 4530	Economics of Health	This course provides an overview of the U.S. health care system and the role that economics plays in advancing our understanding of it. Topics included are the demand for medical care and health insurance, the role and impact of government in funding health care services (Medicare and Medicaid), cost benefit analysis, pharmaceuticals and the FDA, organ donation and vending, as well as health care and insurance in other developed countries. Throughout the course, students have opportunities to improve their writing through instruction and assigned papers.	S
ECP 4613	Urban Economics	This course is an analysis of trends in urban economies in the U.S. and elsewhere. Introduction to economic and demographic data sources for analysis of urban areas; issues confronting contemporary urban places.	S
ECP 4618	Research Methods for Studying Housing, Land and Cities	This course explores the use of quantitative research methods to evaluate and understand the performance of economies, with a focus on land use, housing, urban economic growth, housing finance and public finance. Each student will be responsible for identifying a research topic, defining the research question, and conducting original research as part of the course through a workshop format supervised by the instructor.	S
ECS 3022	Social Entrepreneurship and Economic Development	This seminar incorporates the practical realities of economic development program implementation into the classroom, using a discussion format and case studies of real world applications. The readings are used to provide a broader context for the discussion of specific cases and more general theories. An emphasis is placed on "lessons learned" and discussion of the constraints and potential for implementing effective economic development programs in low-income areas of the United States and world, with a special focus on cities.	S



ECS 4013	Economics of Development	This course presents economic development as a process, description and analysis; alternative overall theories of development; particular problems and policy responses to them; strategic choices in development policy. Main focus on third world economies.	S
ECS 4431	Economics of the Caribbean	This course provides a detailed introduction to the analysis of economic development of Caribbean countries, including a discussion of the basic characteristics of Caribbean economies, a discussion of alternative theories and models of development, as well as a range of particular economic and social issues of concern to policy makers within Caribbean countries. Focus is on the actions available to Caribbean nations for addressing their development concerns within their region and/or country.	IS
EVR 4314	Energy and Society	This course explores the demand and efficient use of energy from fossil fuels and alternate renewable sources, and how energy impacts urban and environmental sustainability.	S
GEO 1000	World Geography	This course is a regional survey of the human occupation of the face of the earth, local cultures, political systems, and development problems.	S
GEO 2210	United States and Canada	This course examines the physical diversity and the cultural and political patterns of North America.	IS
GEO 2270	Florida	This course focuses on the physical, social, and economic geography of the state, including growth and environmental issues.	S
GEO 4213	U.S. National Parks	This course reviews the history, social, and environmental significance of America's national parks.	IS
GEO 1330	Introduction to Environmental Sciences/Studies	This course explores the causes of local and global environmental problems and their impacts, including resource use, pollution, ecosystems, and population growth. This course introduces students to some of the most pressing environmental issues of our time. Understanding complex environmental problems and potential solutions requires multiple disciplinary perspectives. We will examine issues from scientific, social, economic and political perspectives.	S
GEO 1330	Environmental Science	This course explores the causes of local and global environmental problems and their impacts, including resource use, pollution, ecosystems, and population growth.	S
GEO 1400	Human Geography	This course is an introductory survey of world cultures, population problems, global economic restructuring, international development, and political interdependence.	S
GEO 2200C	Physical Geography	This course is an overview of earth-sun relations, weather, climate, landforms, water systems, soils, and vegetation.	IS

GEO 3502	Economic Geography	This course examines the geography of economic activity at local, national, and global scales: historical development of capitalism, regional development, spatial structure of agriculture, manufacturing and services, the global economy, third world poverty, and population growth.	S
GEO 4114	Environmental Field Methods	This course focuses on the design and implementation of a field-based project employing field sampling, GIS, GPS, and exploratory statistical methods.	IS
GEO 4162C	Spatial Data Analysis	This course is an introduction to the quantitative analysis of geographic data that explores clustering, spatial patterns, and intrinsic relationships between <u>geographic variables</u> .	IS
GEO 4210	Landforms and Landscapes	This course is on the spatial distribution of geomorphic landforms across landscapes: how they form, how they change over time, how they are designated, and their nomenclature. Emphasis is given to how humans interact with these landscapes and how these landscapes can impact human habitation.	S
GEO 4251	Geography of Climate Change and Storms	This course explores the critical debate on global climatic fluctuations and extreme weather frequency in relation to human impact and interference. Particular focus is given to geographic variations and temporal validity.	S
GEO 4300	Biogeography	This course examines the spatial distributions of flora and fauna, ecosystem change, and human interventions such as logging, invasive species, and <u>wilderness preservation</u> .	IS
GEO 4340	Living in a Hazardous Environment	This course explores types of environmental hazards (natural and human-made) and their effects, techniques for the analysis of risks, and strategies for <u>recovering losses</u> .	S
GEO 4355	Geography: Food and Environment	This course explores food production, distribution and consumption by intensive global agro-food and local organic farm operations, and their impacts <u>on environmental sustainability</u> .	S
GEO 4357	Environmental Conflict and Economic Development	This course examines controversies over the use, transformation, and destruction of nature, including political ecology.	S
GEO 4376	Landscape Ecology	This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interactions and implications. Familiarity with software packages such as ArcGIS is assumed.	IS

Geography

GEO 4376	Landscape Ecology	This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interactions and implications.	S
GEO 4403	Global Change, Local Places	This course examines four aspects of global change—economic, environmental, cultural, and political—with a focus on how globalization is impacting individual countries and how places are responding to globalization’s challenges.	S
GEO 4412	Environment and Gender	In this course, students look at how physical space (be it national boundaries or public parks) and the terrain of the symbolic realm are sometimes at odds. Included in this investigation is the examination of how ideas of gender, place and space affect individuals’ experiences and how said experiences are created and limited by ideas of space at various geographical scales and contrasts between more and less economically developed nations.	S
GEO 4421	Cultural Geography	This course studies the processes by which various cultural features have diffused throughout the world. Emphasis is on the contemporary cultural landscape.	S
GEO 4450	Medical Geography	This course applies geographical concepts and techniques to health-related problems, including the ecology of health, disease diffusion, medical cartography, and health care access.	S
GEO 4471	Political Geography	This course focuses on the spatial dimensions of political processes from the local to the global level, including elections and geopolitics of the world system.	IS
GEO 4503	Globalization	This course explores the concepts and processes that define a world system of commodity production, labor costs, and cultural exchange.	S
GEO 4602	Urban Geography	This course explores the historical growth of cities; spatial structure of commercial, industrial, and public facilities within cities; residential segregation; urban poverty and fiscal distress, and urbanization in the third world.	S
GEO 4700	Transport Geography	This course offers a review of the literature and techniques for the spatial impacts of transportation systems, including functionality, and their role on society, the economy, energy, the environment, and sustainability.	S
GEO 4930	Special Topics in Geography	Topics vary.	IS
GIS 3015	Map Analysis	This course investigates and demonstrates the 'power' of maps and spatial thinking for representing the world. The course investigates territorial and mental communication of places and their patterns through scale, generalization and symbols.	IS

GIS 4035	Introduction to Remote Sensing	This course covers remote sensing foundations and the use of remote sensing for environmental and cultural applications. Focus is on the foundations of remote sensing, aerial photography and photogrammetry, characteristics of various sensing systems, remote sensing applications, and an introduction to digital image processing.	S
GIS 4035L	Introduction to Remote Sensing Lab	This lab provides practice with the concepts and techniques in remote sensing. Specifically, the lab covers the foundations of remote sensing, aerial photography and photogrammetry, characteristics of various sensing systems, remote sensing applications, and basic skills in digital image processing.	S
GIS 4043	Geographic Information Systems	This course is a survey of GIS topics, including locational control, spatial data structures, modeling and analysis, and future trends in decision support, sensors, and geographic methods.	IS
GIS 4043L	GIS Lab	This course is a survey of GIS topics, including locational control, spatial data structures, modeling and analysis, and future trends in decision support, sensors, and geographic methods.	IS
IDS 2227	Sustainable Society	This course provides students with the opportunity to observe and inquire about sustainable practices through field studies at local organic farm, hydro-power station, new urbanism community, and recycling facilities, etc., as well as through interactions with community-based programs. Students engage in critical thinking about the sustainability of human society and the environment from various aspects, which include producers, consumers, public-service sectors, and policy makers.	S
IDS 2471	Glaciers, Geysers, and Glades: Exploring U.S. National Parks	This course explores the sustainability of the National Parks of the United States; their geographic distribution, physical structure, economic management, and cultural recreation.	S
IFS 2070	Thinking Beyond Ourselves: Global Perspectives	This course is designed to introduce the students to the basic concepts, theories, functions and behaviors associated with intercultural communication. Throughout the course students increase in knowledge, understanding and awareness of different cultures and countries, interpret cultural values and communication strategies used across cultures/countries, and become more effective in engaging in the 21st-century globalized world.	IS
IFS 2089	Global Engagement	This course gives students the opportunity to study a different country's unique customs, values, and traditions and compare it with their own through actively participating in cultural experiences.	IS

Socia

International Affairs	INS 2912	Developing Global Citizens: Global Issues in Theory and Practice	This course is the final required class for the Global Citizenship Certificate. The course increases students' global competencies by utilizing theories and concepts learned during the Global Perspectives course and applies those to higher-level critical thinking and research. The course explore topics relevant to today's global society such as extreme poverty and inequality, international trade, political cooperation, climate change, race, and ethnicity and gender.	S
	INS 3003	Introduction to International Affairs	This course introduces students to the core questions and concerns of international affairs. The course surveys the many distinct academic disciplines that together contribute to the development of an interdisciplinary understanding of the international system. The course also examines how each of these disciplines understands the international system, the questions it raises, and its strengths and weaknesses. In addition, the course provides an introduction to many of the global issues of interest to international affairs majors, including terrorism, democracy, and globalization. At the end of this course, students have the skills and knowledge required to construct their own specialized plan of study in international affairs.	IS
	CPO 2002	Introduction to Comparative Government and Politics	This course addresses government institutions and current political parties throughout the world, as well as theories that explain similarities and differences among countries. Topics may include electoral systems, parliamentary systems, causes of political change, democratization, political culture, ideologies, and economic and social policy. Examples are drawn from Western democracies and developing countries.	IS
	CPO 3101	European Union	This course covers the historical development, political institutions, and philosophical underpinnings of the European Union. Topics include federalism, different notions of sovereignty, contemporary decision-making in the EU, assessments of democratic institutions in Europe, and prominent points of debate, such as monetary union, trade policies, environmental policies, and enlargement policies.	IS
	CPO 3743	States and Markets	This course analyzes the multifaceted ways in which political and economic spheres interrelate. Students will be exposed to relevant debates on democracy and growth, the state's role in the economy, corruption, natural resources, and redistribution.	S
	CPO 4057	Political Violence	This course introduces students to scholarly writing on violent political conflict. Reviews theories of guerilla struggle and counter-insurgency, as well as the philosophy of non-violent direct action and several theories of conflict resolution. Course also explores the human costs of political violence.	IS

## Political Science

CPO 4504	Institutional Approaches to Democracies and Dictatorships	This course examines questions about democracy and dictatorship from an institutional perspective. What is democracy and how is it measured, and how does regime affect the welfare of citizens? An emphasis is on the variety of institutional arrangements found in dictatorships.	IS
INR 3502	International Organization	This course covers the role of global and regional international organizations in contemporary world politics. Special emphasis is placed on the United Nations system, including its structure, activities, influence, and role in world <u>integration</u> .	IS
INR 4011	Political Responses to Economic Globalization	This course examines economic globalization: what it is, who is harmed and helped by it, how countries and citizens respond to it, and what the future might hold. The course focuses heavily on economic issues but assumes no <u>background in the subject</u> .	S
INR 4075	International Human Rights	This course introduces the student to the philosophical and legal foundations of the international human rights regime, and explores the development of norms and institutions with special emphasis on the post-World War II era.	IS
INR 4078	Confronting Human Rights Violations	This course investigates various means of confronting massive human rights violations. It compares the recent phenomenon of truth commissions and pardons to the more traditional, legalistic approach of criminal prosecution. Moral issues involved in each approach and how each serves society are explored. Specific truth commission cases are studied.	IS
INR 4702	Political Economy of International Relations	This course examines the interaction between politics and economics in international relations. Topics covered include international trade, the global monetary system, multinational corporations, regional integration, and <u>economic development</u> .	S
POS 3122	State Politics	This course focuses on government and politics in the American states. It looks at the governor, the legislature, and the courts; the history of federalism; and policies, practices, and social institutions that affect state government. Includes a study of state policies in such areas as welfare, education, crime, and the <u>environment</u> .	S
POS 3691	Law and Society	This course surveys the American legal system including the role of lawyers; sources and types of law; and courts, legislatures, executive agencies, and other law-making institutions. Also links law and legal behavior to the social, economic, and political features of modern society.	S

POS 4070	Race, Ethnicity, and Politics	This course examines how race and ethnicity are interwoven in American politics by viewing the role of African-American, Latino, and Asian-American voters, candidates, and public officials, and looking at the political attitudes of these groups.	IS
POS 4206	Political Psychology	This course examines the psychological origins of citizens' political beliefs and actions, while providing an overview of the theories and methods used in the field of political psychology. Topics cover information processing, emotion, attribution, tolerance, stereotyping, prejudice, and political communication.	IS
POS 4624	The Supreme Court, Civil Liberties, and Civil Rights	This course reviews recent interpretations of the Bill of Rights and 14th Amendment case law with special attention to freedom of expression, equal protection, and criminal due process rights.	IS
POS 4715	Politics and the Theory of Games	This course discusses elementary theories of individual and group decision-making which are used to analyze various political phenomena such as the arms race, legislative politics, majority rule in democracies, voting and elections, and coalition governments.	IS
PUP 3002	Introduction to Public Policy	This course is an introduction to the development of public policy in the United States. Covers main policy areas including housing, education, the economy, homeland security, etc.	S
PUP 4203	Environmental Politics and Policy	This course focuses on the actions taken by government to protect and improve environmental quality in the United States. It includes such topics as the underlying scientific principles, the major actors in policy making, existing legislation, and future challenges.	S
PUP 4931r	Special Topics in Public Policy	Policy alternatives and the policy-making process on a specific contemporary policy question in America, e.g., science research and development, energy, regulation, taxes, environment. Varies with the instructor and semester.	IS
IFS 2004	The Hunger Games Trilogy: Collective Action and Social Movements	This course is an introduction to the sociological study of collective behavior and social movements. This course is organized to highlight themes in The Hunger Games series by Suzanne Collins, which students analyze during the semester. Students have an opportunity to research a movement of their choosing during the semester.	IS
IFS 3137	Politics of Reproduction	This course is an introduction to studying the social and political dimensions of human reproduction. In each class, students address historical context, sociopolitical trends, and contemporary debates regarding specific themes and topics related to reproductive politics. Course material and discussions draw from varied perspectives and interdisciplinary resources, including sociology, demography, anthropology, history, medicine, and public health.	IS

## Sociology

SYA 4400	Social Statistics	This course involves the application of statistical techniques to sociological data as illustrated in the research and writing of social scientists. As a course for majors, it represents an important part of the student's methodological training with respect to the statistical analysis of data typically used by sociologists. The student is expected to carry out a number of exercises involving the statistical analysis of sociological data and to interpret the results. This is a required course for sociology majors.	S
SYA 4935	Capstone for Outstanding Majors	In this course, through course readings, discussion, and projects, students learn more about how to apply social theory and methods to conduct research and <u>design programs to address social inequality.</u>	IS
SYD 3020	Population and Society	This course examines the causes and consequences of population change in the United States and the world with an assessment of the impact of demographic <u>change on various social institutions.</u>	IS
SYD 3600	Cities in Society	This course explores changes in societal scale and structure associated with development of cities and urban societies, the impact on individuals and social groups of the urban context, and the ways that life in cities is influenced by social inequalities related to ethnicity, social class, and other dimensions of <u>social organization.</u>	S
SYD 3800	Sociology of Sex and Gender	This course examines how gender, as an identity, interaction, institution, and inequality, influences individuals' lives and organizes society.	IS
SYD 4510	Environmental Sociology	This course examines the larger social forces that shape our natural environment; the social foundations of environmental problems; and the social responses to environmental issues, conflicts, and movements.	S
SYD 4700	Race and Minority Group Relations	This course explores historical and contemporary race relations in the United States from a sociological perspective. Specifically, students study the underlying issues that characterize the relations between and among different <u>ethnic and racial groups in the United States.</u>	IS
SYG 2010	Social Problems	This course represents a study of various contemporary social problems in an urbanized society, which may include such topics as education, the family, politics, the economy, race relations, drug use and alcoholism, over-population, <u>and other issues.</u>	S
SYO 3100	Families and Social Change	This course is a basic sociological approach to conditions, issues, and problems of familial organization within the context of changing institutional structures of modern society. Attention is given to such questions as: How have spouse roles changed, and why? How do changes in the organization of work affect family experience? How are family and kinship patterns affected by an aging <u>population?</u>	IS



SYO 3460	Sociology of Mass Media	This course provides a sociological view of mass communications by critically examining the origin, history, and functions of the American mass media and its effect on social life.	IS
SYO 4300	Sociology of Politics	This course deals with American political institutions, political organizations, pressure groups, and the public's participation in political processes. Discussion focuses on current political issues from a sociological perspective.	IS
SYO 4402	Medical Sociology	This course explains why and how social structure influences the distribution of health and illness and illustrates how the medical care system is organized and responds.	IS
SYP 3350	Collective Action and Social Movements	This course explores the origins and organization of social movements, the dilemmas and challenges facing social movements, the relationship between social movements and political institutions, and the role of social movements in causing social change.	IS
SYP 3454	The Global Justice Movement	This course critically examines the history, organization, strategies, ideology, opponents, culture, and future prospects of the global justice movement.	IS
SYP 4650	Sports and Society	This course explores the topics of sport from a critical perspective focusing especially on inequalities in gender, race, class, and power. This class jointly examines sports as a social mirror that reflects status inequalities as well as the role of sports in perpetrating social inequalities.	IS
URP 3000	Introduction to Planning and Urban Development	This course introduces planning concepts and the role of planning in formulating policy, meeting critical problems, and shaping the future urban environment.	S
URP 4022	Collective Decision Making	This course provides an introduction to planning as a collective decision-making tool, and introduces the concepts of efficiency, equity, and environmental quality as competing bases for public decisions. The course examines tools for contributing to public decisions in varying circumstances, including unitary and diverse decision makers, certain and uncertain environments, and simple and complex goals.	S
URP 4402	Sustainable Development Planning in the Americas	Examines various dimensions of the "sustainable development" paradigm and its local-global policy implications, issues, and controversies with a focus upon North America and Latin America. Organized in three modules: 1) environmental philosophies that have influenced the movement; 2) North American approaches to planning for sustainable development; and 3) critical issues of sustainable development in Latin America.	S

Urban & Regional Planning	URP 4404	River Basin Management and Planning	This course introduces river basin management and planning and takes a systematic approach from biological, hydrological, and geopolitical viewpoints. Special emphasis is placed on the planning and management of transboundary (interstate and international) basins. The focus is on world river basin systems as well as on the local Apalachicola-Chattahoochee-Flint basin. Students are introduced to technical concepts and tools, including negotiation and math simulation tools.	S
	URP 4408	Food Systems Planning	This course provides a contextual understanding of food systems in the formation of cities, the impacts of food policy on food systems, and planning responses to the many challenges that arise in relation to the globalized food system.	S
	URP 4423	Introduction to Environmental Planning and Resource Management	This course is a general introduction to the problems of resource management and environmental planning, with an overview of problems and potential solutions and their relation to other public policy areas such as land-use control and regional development.	S
	URP 4710	Introduction to Transportation Issues and Transportation Planning	This course is an introduction to contemporary U.S. transportation problems, sources of funding, and legislation. Presents the theory and methods employed by planners in the process of resolving transportation problems.	S
	URP 4811	Multicultural Urbanism	This course studies past, present, and future urban geographies and the impact urban social and economic policy have on social equity. Students learn the significance of race, gender, ethnicity and Identity in urban development and urban life.	S
	URP 4936	Special Topics in Urban and Regional Planning	This course is a selected topics seminar for the discussion of unique and timely planning related issues. Content varies.	S
	URP 4936r	Special Topics in Urban and Regional Planning	This course is a selected topics seminar for the discussion of unique and timely planning related issues.	S
	URS 1006	World Cities: Quality of Life	In this course, major world cities are examined in terms of their natural, social, and built environments in order to assess those factors that promote quality-of-life and sustainability. Prospects for future growth and change are considered in light of demographic, cultural, economic, and political trends.	S
	URS 1006	World Cities: Quality of Life	In this course, major world cities are examined in terms of their natural, social, and built environments in order to assess those factors that promote quality-of-life and sustainability. Prospects for future growth and change are considered in light of demographic, cultural, economic, and political trends.	S

	ISS 2932	Seminar in Social Science and Public Affairs	This course examines key issues and controversies that students are likely to encounter as they pursue a major in one of the social sciences. Topics vary, and look at major fields of study within the Social Sciences. Designed for students enrolled in the Social Sciences and Public Policy Living-Learning Community (SSPPLIC)	IS
	ISS 3241	Foundations of Social Entrepreneurship and Innovation	This course provides a comprehensive overview of the emerging field of social entrepreneurship and innovation, examining how it promotes innovative, impactful, and sustainable solutions to social and environmental problems at the local, national, and international levels. The course looks at how the field is defined and expressed in three essential contexts: innovation and impact across the public, private, and citizen sectors; social enterprise within the context of nonprofit, for-profit, and hybrid organizations; and social transformation throughout an entire system.	S
	ISS 4014	Evidence Based Public Policy	This interdisciplinary public policy course emphasizes the social science concepts which provide fundamental insights into how public policy is created through collective action and how it can succeed or fail by the actions of individuals and institutions.	S
	ISS 4304	Contemporary Social Problems	This course is designed to introduce the benefits and methods of interdisciplinary research and study. This course uses multiple and interrelated perspectives to identify and explore social issues and problems. Students are guided through the process of building interdisciplinary perspectives to maximize cognitive skills, critical thinking and problem solving skills.	IS
	SOW 1054	Human Services Experience	This course entails a direct human service experience in a social services	IS
	SOW 4104	Human Behavior in the Social Environment	This course focuses on reciprocal relationships between human behavior and social environments. Content includes system theory, an ecological perspective, and life course theories that focus on human development at the individual and family level, including interactions between and among systems of all sizes, including groups, societies, and economic systems.	S
	SOW 4108	Women's Issues and Social Work	This course is designed to acquaint students with the factors that affect women throughout life and the role that social work plays in addressing these issues.	IS
	SOW 4152	Human Sexuality	This course is a survey of issues and problems associated with human sexuality, intended for social workers and others in helping professions. Emphasis is placed on sexually oppressed groups, sexual life cycle from a psychosocial perspective, and student's attitudes and values regarding sexuality.	IS

Social Work

SOW 4247	Homelessness in America: People, Programs and Policies	This course covers poverty in the United States, with particular emphasis on homelessness. It includes content related to values and ethics in programs and policies as well as cultural diversity among people in poverty. Particular attention to those who suffer from poverty and other societal oppression, such as those who are also people of color, women, gays, lesbians, HIV positive, or disabled.	IS
SOW 4290	Ethical Issues in Social Work Practice	This course provides students with a framework of knowledge and skills to prepare them for effective and ethical decision making that is congruent with codes of ethics and standard practice in the social-work profession. Also explored are the principles of ethical decision making and various value systems.	IS
SOW 4323	Social Work Practice with Groups	This course focuses on the development of the generalist practice skills of engagement, assessment, intervention, and evaluation with social work client and community groups. This course covers practice skills that contribute to group effectiveness, including composition, structure, dynamics, goal setting, and evaluation. Course content also includes examining the empirical base of a range of theories and models for social work with groups.	IS
SOW 4341	Social Work Practice with Individuals and Families	This course focuses on the development of the generalist practice skills of engagement, assessment, intervention, and evaluation with individuals and families in social work. The empirical bases of a range of theories and models of social work practice are examined, along with applications to generalist social work practice. Ways to promote social and economic justice while practicing as a social worker are also discussed.	S
SOW 4360	Social Work Practice with Communities and Organizations	This is one of three courses in the practice foundation curriculum. The course is designed to introduce students to a range of theories and models of social work practice from an ecological framework.	S
SOW 4620	Diversity and Social Justice	This course enhances student understanding of human diversity and prepares students to engage in a lifetime pursuit of cultural competence. Students are encouraged to reflect upon and discuss the intricacies of their own particular dominant and/or minority social statuses and their relations to other individuals and communities. The course is designed to train students to apply theoretical frameworks to the forms and mechanisms associated with diversity, differences, and oppression. Emphasis is placed on enhancing respectful and empathic communication, and on the advancement of social and economic justice and human rights in national and global contexts.	S

SOW 4784	International Social Work and Social Welfare	This course prepares students for international social-work practice and for transitional work with immigrants, refugees, international migrants, etc. The course also introduces international perspectives in the social-work field and offers varied examples of social-work practice in the U.S., and Western, Central European, and Caribbean nations and examines the impact of the global interdependence on social-work practice and policy and helps students learn to critically analyze varied practice approaches utilized in dealing with international welfare issues.	IS
SOW 4940	International Community Engagement	This course utilizes a service learning experience in an international social services organization to introduce students to international social work practice and a range of global social issues that shape human welfare and social development.	S
SOW 5034	The Social Work Profession	In this course, students begin to identify with the social work profession, its history, mission, and core values, and conduct themselves in accordance with the ethical principles that guide professional practice. Students also learn how the social work profession engages in policy and practice to address issues of social and economic well-being. They begin to recognize the social, political, economic, and environmental influences on client systems of all sizes and apply them to the conduct of social work practice.	S
SOW 5249	Homelessness in America: People, Programs and Policies	This course covers poverty in the United States, with particular emphasis on homelessness. It includes content related to values and ethics in programs and policies as well as cultural diversity among people in poverty. Particular attention to those who suffer from poverty and other societal oppression, such as those who are also people of color, women, gays, lesbians, HIV positive, or disabled.	IS
CJC 3311	Corrections: Practices and Perspectives	This course introduces the major issues concerning the history, law, practices, and perspectives in American Corrections. Students examine the interaction of correctional perspectives and practices, their consequences, and policies being advocated to change them.	IS
CJE 3761	Introduction to Underwater Investigation	This course presents the history and principles of basic oceanography, physics, and physiology as they relate to exposure to compressed gas environments and how to deduce safe parameters from those principles. This course provides the theoretical foundation for individuals preparing to be scientific investigators underwater.	IS

	Public Safety	CJE 3761L	Introduction to Underwater Investigation Laboratory	This laboratory course presents the principles and practice of compressed-gas as a life-support system for underwater hyperbaric exposure. This course is designed to develop proficiency in the basic skills required to perform safe underwater investigations, including recording observations and conducting underwater environmental surveys. Additional equipment fee required.	IS
		CJ 3013	Youth Culture and Crime	This course explores the unique characteristics of juvenile offending and victimization by examining the cultural traits that differentiate youths from society in general. In doing so, the class investigates various distinct subcultures globally and the relationship between specific forms of offending and subcultural traits.	IS
	Recreation	LEI 3004r	Introduction to Recreation, Tourism and Events	This course provides an introduction to the nature and diversity of recreation pursuits and the social and cultural forces that influence leisure related choices. Students examine the various ways in which recreation is organized for delivery by professionals working in the recreation and event industry. Career opportunities in recreation, park, and event management are explored.	IS
		LEI 3266	Outdoor Adventure Education	This course provides education in teaching leadership and programming skills for outdoor adventures through observation, direct participation and skills demonstration.	IS