

FALL 2001 CATALOG SUPPLEMENTAL COURSE DESCRIPTIONS

This section is the supplement to the current undergraduate and graduate catalogs.
Courses not found nor fully described in the 2001-02 catalog are printed here.

ANTHROPOLOGY

ANTH 367-010 THE ARCHAEOLOGY OF THE ORIGINS OF AGRICULTURE

Surveys the archaeological record of the transition from hunting and gathering to farming societies. Examines both the archaeological evidence of this transition and theories of its causes and consequences. Includes food production and alternatives, transition to food production and social impacts of agricultural life. Adopts a broad anthropological perspective.

ANTH 390-080 HNRS COLQ: INTERPRETING THE PAST

Considers the different perspectives applied to learning about the past. Begins with how individuals remember their personal experiences as well as those of their families. Then how political agendas and cultural affiliation can affect interpretations of documented history. Finally, considers the varying interpretations that archaeologists can derive from their analyses of material remains.

ART HISTORY

ARTH 606-010 STDS: FRANKISH MANUSCRIPTS

Focuses on manuscripts decorated in the Frankish kingdom. Special attention will be given to historiographical issues, and to the study of individual original manuscripts. Reading knowledge of French and/or German and willingness to make three all-day Friday field trips are required.

ARTH 614-010 STDS: ALBERTI

Investigates the life, career, and writings of the most influential theorist of Quattro cento Italy. Topics include: humanism, Alberti's patrons, Early Christian revivals, the role of the antique (Vitruvius, archeology, etc.) fame, ideal cities. Students may work on topics related to painting, sculpture, theory, or architecture.

ARTH 616-010 STDS: CARAVAGGIO

Investigates the life, art, and historiography of the most enigmatic painter of the Italian Baroque. Topics include: homoeroticism, studio practice, rejected works, criminality and exile, self-portraiture and still life.

ARTH 623-010 STDS: MODERNISM 1900: SYMBOLISM

A study of symbolism in the visual arts, including case studies of individual artists and writers; symbolist theory and criticism, and interactions between literary and visual symbolism. A focus on France and Belgium, but students may research topics outside this context.

ARTH 636-010 STDS: THOMAS EAKINS

This seminar will explore the work of Eakins in relation to issues of realism, modernity, science, social identity, and Gilded Age culture. It will take advantage of a major retrospective held concurrently at the Philadelphia Museum.

BLACK AMERICAN STUDIES

BAMS 440-011 HISTORY OF AFRICAN AMERICAN ART

A chronological overview of art by African Americans from the early 18th century to the end of the 20th century. Examines work from the context of the African American experience and its contribution to art of the U.S.

BIOLOGICAL SCIENCES

BISC 104 PRINCIPLES IN BIOLOGY

Studies biological principles at molecular, cellular, organismal and ecological levels. Fosters biological literacy through the exploration of concepts, theories and methods in relation to topics, developments and controversies in biology that impact citizens' lives and require informed decision making.

BISC 300 INTRODUCTION TO MICROBIOLOGY

Major groups of microorganisms (algae, protozoa, fungi and bacteria) are studied. Emphasis is on the physiology, metabolism, diversity and interactions between and among each group and bacteria and their interactions with humans. Lab included.

BISC 367 GENERAL PHYSIOLOGY LABORATORY

The laboratory co-requisite for BISC-306.

BISC 403-010 GENETIC & EVOLUTIONARY BIOLOGY

The physical and chemical basis of heredity, the nature and mechanisms of gene action, genes in populations, speciation. Co-requisite for BISC 467.

BISC 467 GENETIC & EVOLUTIONARY BIOLOGY LABORATORY

The laboratory co-requisite for BISC-403.

BISC 467/667-045 DEVELOPMENTAL NEUROBIOLOGY

Covers the developmental biology of the nervous system. Includes basic structure of the nervous system, cellular components of nervous tissue, neural induction, neurogenesis, neuronal migration, determination, axon path finding, synapse formation, programmed cell death, neurotrophic factors, and critical periods. Covers neural development at the levels of molecules, cells, and systems.

BISC 618-010 COMPUTER IMAGING IN BIOLOGY

Principles and methods of computer image processing as they apply to biological images. Laboratory provides hands-on experience prompted by prepared tutorials. Students develop their own projects and present them as posters or other formats.

BISC 665-010 ADVANCED MOLECULAR BIOLOGY AND GENETICS

Presents concepts and approaches regarding our current understanding of molecular biology and molecular genetics in eukaryotic organisms. The course is team taught and requires a solid background in biochemistry, cell biology and introductory molecular biology.

BISC 667-012 BACTERIAL EVOLUTION

Objectives include: understanding proposals for the origin of life and the formation of the earliest cell types; principles of bacterial taxonomy, both historical and modern; selected examples of current topics, some controversial, in bacterial evolution.

CHEMICAL ENGINEERING

CHEG 867-010 CHEMICAL ENGINEERING PRINCIPLES

Examination of Chemical Engineering Principles from an applied mathematics point of view. Uses prototype problems to show the usefulness of applied mathematics. A unified mathematical framework of linear algebra, partial differential equations, and modeling concepts emerges to formulate and solve such problems. Introduces available software for the numerical or symbolic solution of more complex problems.

CHEG 867-011 MOLECULAR AND CELLULAR ENGINEERING

Central fundamental interactions in biology are addressed from an engineering perspective, focusing on understanding the nature of the systems and using molecular approaches to interpretation of experimental observations.

CHEMISTRY

CHEM 667-010 DNA-PROTEIN INTERACTIONS

Discussions of current topics in DNA-Protein interactions that focus on DNA recombination, DNA damage repairs, and DNA replication.

CHEM 667-011 INTERFACE RESEARCH: CHEMISTRY/ BIOLOGY

Consists of research experiences in each of three laboratories chosen to represent different research areas within Biochemistry, Molecular Biology, Bioanalytical Chemistry, Bio-organic Chemistry, Computational Chemistry, Biochemical Engineering, Bio-inorganic Chemistry, Protein Crystallography, and Agricultural Biochemistry and Virology.

CHEM 667-012 GREEN CHEMISTRY

Green chemistry avoids pollution by utilizing processes that are benign by design. Provides an up-to-the-minute view of the emerging field, including substitutes for phosgene, isocyanates, liquid acids, toxic heavy metal ions chlorinated compounds and pesticides. Novel separation techniques, waste reduction, and recycling are also covered.

CIVIL ENGINEERING

CIEG 367-010 PROBABILITY AND STATISTICS FOR ENGINEERS

Deals with basic concepts of uncertainty modeling, data analysis, statistical inference and decision-making in the presence of uncertainties. Includes set operations, probability, Bayes' theorem, random variables, common probability distributions (discrete and continuous), joint distributions, functions of random variables, data reduction, testing of hypotheses, regression analyses and introduction to probability-based design and Monte-Carlo simulation. Prereq: MATH 242 AND MATH 243.

CIEG 467/667-013 CIVIL INFRASTRUCTURE SYSTEMS

Provides students with theory and principles of civil infrastructure management system. Introduce students to AASHTO guidelines in asset management, discuss resource requirements and the importance of institutional issues in infrastructure management systems decision making.

CIEG 667-014 FOUNDATION AND GEOTECHNICAL ENGINEERING DESIGN

Presents a graduate level introduction to practical design and construction related to the following topics: Subsurface investigations and laboratory testing, stability and settlements of soil slopes and embankments, shallow foundations, and deep foundations.

CIEG 865-013 SEM: EMERGING METHODOLOGIES FOR CIVIL AND ENVIRONMENTAL ENGINEERING ANALYSIS

Discusses different emerging methodologies that are applicable to civil and environmental engineering analysis. Includes approach to modeling large scale systems, optimization, soft computing, treatment of uncertainty, simulation, estimation of extremes, finite element method, and decentralized approach. Experts both within and outside the department will give lectures.

COMPUTER SCIENCE

CISC 367-010 EMBEDDED SYSTEMS

How to program embedded systems (game devices, data transmission devices, etc.), given the special needs created by their environment. Target microprocessor: MIPS R3000, testing environment: IDT/sim PROM System Development Kit. Students will write an Exception Handler as part of a final project. Prerequisites are: CISC260 and CISC 360, and a knowledge of C.

CONSUMER STUDIES

CNST 267-010 ANALYSIS OF CONSUMER DISABILITY ISSUES

Introduction to consumer issues for people with disabilities. How definitions of disability shape public policy and the delivery of goods and services will be analyzed. Topics will address access to housing, transportation, education, employment and other aspects of community living.

CNST 367-010 CIVIL RIGHTS LEADERSHIP AND LAW

Examines the American Civil Rights Movement from 1900 through 1965. Explores the evolution of the legal, political and social status of African-Americans from the era of state-sponsored segregation through the enactment of the Civil Rights Legislation of the 1960's. Determines how leaders were able to effectuate reforms despite circumstances that were arrayed against them.

COMMUNICATIONS

COMM 418/618-010 TPCS: MEDIA ETHICS & ACCOUNTABILITY

An examination of the role(s) that mass media are expected to fulfill in society, and of the various ways for holding media accountable for meeting those responsibilities.

COMM 418-011 TPCS: BROADCAST PROGRAMMING

Examines the principles and strategies of programming for broadcasting and cable. General topics include: audience feedback; network and local programming; syndication and specialized programming.

COMM 425-010 ADV TPCS: HIST TV DOCUMENTARY

We excavate some of the best investigative TV news documentaries of the 1950's, 1960's and 1970's, which exposed political and social problems to a mass audience, to discover why they were made, why they were influential and why they're no longer on today's broadcasting agenda.

COMM 618-011 TPCS: SOCIAL IMPACT & COMM TECHNOLOGY

This seminar considers the social and psychological effects of new communication technologies (e.g., the WWW, email, videogames, distance learning, digital video). The course will focus on the application of communication theory to understanding the impact of new media.

COMPUTER ENGINEERING

CPEG 467-010 COMPUTER NETWORK SECURITY

Surveys current topics in computer network security, including technology to protect networks and hosts against intrusion, theft and denial of service. Includes security models for networks, servers and clients, and cryptographic algorithms for authentication, privacy, digital fingerprint and digital signature. Includes network and system security protocols and the protection of electronic cash transactions. Prereq: CISC361 or permission of instructor.

CRIMINAL JUSTICE

CRJU 167-010 DIMENSIONS OF JUSTICE

Surveys approaches to justice studies across a broad range of academic disciplines. Using a Problem Based Learning format, emphasizes a cooperative approach to the development of skills essential to making informed decisions about future studies and career choices in justice related fields.

CRJU 367-010 EXPLORING CRIMINAL JUSTICE

Looks at the evolution of criminal justice in the 20th century. Examines the past in an effort to understand the meaning of crime, justice, and the human condition.

ECONOMICS

ECON 367-010 ECONOMICS OF FAMILY BUSINESS

Enables students to apply economic reason to some of the issues unique to family business - the role of entrepreneurship, family issues, the dynamic of changing markets, and the next generation.

EDUCATION

EDUC 667-415 INQUIRY RESEARCH ELEM GRADES

A study of using inquiry research as a tool to teach informative reading and writing in the primary classroom. Emphasis is on strategies needed to read and write informative text, integrating content learning with reading and writing and the skills needed to conduct inquiry research.

EDUC 867-010 LEARNING AND TEACHING MATHEMATICS

Focuses on the core issues involved in learning and teaching mathematics, including setting learning goals for students, theories of learning and teaching that address achievement of various goals, and changes in students' thinking that characterize learning in different mathematical domains.

EDUC 867-011 CHILD NEUROPSYCHOLOGY

Covers the essentials of neuropsychological methods in childhood. Topics include functional neuroanatomy and development, acquired brain injury and aspects of intervention including an overview of pharmacologic approaches and inventions used in educational settings.

EDUC 867-012 CRITICAL FEMINIST APPROACHES TO ACTION RESEARCH

Using both critical and feminist theory as a framework, investigates ways to integrate research with efforts for social change in classrooms, schools, and communities. Identifies issues and research projects critical to their own practice and to building educational research and practice that is relevant to the empowerment of communities.

EDUC 867-013 META-PERSPECTIVES ON THE STUDY OF SCHOOLING

Focuses on the nature of research on schooling, its purposes its support within educational institutions and the general public, and its impact on the way schools operate. Students work with a local school (The College School) and the empirical, philosophical, and historical literature on research and schooling.

ELECTRICAL ENGINEERING

ELEG 367-010/011 DIGITAL PHOTOGRAPHY AND TECHNOLOGY

If interested in or if using digital photography, learn both how's and why's. Section 010 requires knowledge in college physics and a good working skill in college algebra. Cannot be used as a technical elective for electrical /computer engineering students.

ELEG 419/619-010 MULTIMEDIA COMMUNICATION

Covers the theory and principles of multimedia communications, including data compression, CD-ROMs, multimedia networking and standards (JPEG, MPEG, H261, H263, RTP, etc.)

ELEG 467/667-011 MICROELECTRONICS: SCIENCE & TECHNOLOGY

Introduces the science, processes and current trends in the art of microelectronic technology. Presents the science of the fabrication processes in silicon, GaAs and SiC technologies. The progressive transition from micro-electronics to nano-electronics is presented using the current edition of International Roadmap for Semiconductors (ITRS) and latest publications. Presents a brief introduction to micro- and nano- electromechanical systems.

ELEG 467/667-013 MICRO-ELECTRO-MECHANICAL SYSTEMS (MEMS)

Provides a multi-disciplinary overview of silicon based MEMS technologies for students from all areas of science and engineering disciplines. Design, fabrication and packaging of MEMS will be thoroughly explored with illustrative examples.

ELEG 648-010 ADVANCED ENGINEERING ELECTROMAGNETICS

Focuses on the development and application of Maxwell's equations as they apply to the analysis of guided wave, radiation, and scattering problems. Topics covered include wave propagation, reflection and transmission, vector potentials, transmission lines and cavities, and special emphasis on antennas and scattering structures.

ELEG 667-010 DISCOVERY INFORMATICS I

Examines the basic principles and methodology in algorithm/system design and implementation for the emerging field of discovery informatics - such as, Bio-informatics, Med-informatics and Finance-informatics. Focuses on the application of discovery informatics to molecular biology, however, the topics covered have a much broader applicability.

ELEG 667-012 PHYSICAL DESIGN OF INTEGRATED CIRCUITS

Provides a link between the IC fabrication and VLSI design courses. Focuses on methods for managing the enormous complexity of integrated circuit designs, and on the interaction between fabrication methods and CAD layout tools. Students will be assigned case studies to be analyzed using MATLAB based software running on real netlists.

ELEG 833-010 NONLINEAR SIGNAL PROCESSING

Covers the fundamental theory and applications of nonlinear signal processing. Includes stable random processes, order statistics, fractional lower order statistics, maximum likelihood estimation and the filtering problem, weighted order-statistic filters, medianization of linear FIR filters, myraid filters, and adaptive optimization of nonlinear filters. Covers digital imaging and video, digital communications, and time-frequency analysis. Prerequisite: Statistical digital signal processing

ELEG 840-010 ADVANCED COMPUTATIONAL ELECTROMAGNETICS

Focuses on the development and application of the finite-difference time-domain method to the solution of Maxwell's equations. Applications to guided wave, radiation and scattering problems will be addressed. Topics discussed are sources, absorbing boundaries, propagation, symmetries, and multiple coordinate systems.

ELEG 867-010 NANATECHNOLOGY

Reviews experimental research into nanotechnology, nanostructures, and mesoscopic devices, and develops a framework for understanding their behavior.

ENGLISH

ENGL 413-410 TPCS: SCIENCE WRITING

Explores science communication by dissecting case studies from microcosmic fields like genetics and molecular biology to macrocosmic ones like optics and astrophysics. With a supplementary writing guide, prepares documents that communicate scientific and technological information; our genre vary from descriptive pieces for lay audiences to publication manuscripts for professional societies.

FOOD AND RESOURCE ECONOMICS

FREC 667-010 GIS TECHNICAL CONSULTANT

Students with prior experience in geographic information systems receive supplemental training in selected GIS topics and provide technical consulting to problem-based learning teams of students in FREC 480, FREC 682 or GEOG 471/671.

FRENCH

FREN 467-010 ADVANCED COMPOSITION AND GRAMMAR

Includes both intensive writing practice and a systematic grammar review (tense use, subjunctive, participles, etc.). Students will read French texts as models, write regular short compositions and work with each other correcting mistakes and improving style. Opportunity to address individual questions or problems. Counts as a 400 level language course for majors.

HEALTH AND EXERCISE SCIENCES

HESC 167-010 BACKPACKING AND BACK COUNTRY TRAVEL

Introduces skills and knowledge necessary for camping and travel in remote areas. Topics include dressing to conserve energy, equipment, low impact camping, cooking and nutrition, safety and first aid, navigation and route selection and weather. A weekend trip will be planned and conducted.

HESC 167-011 BEGINNING ROCK CLIMBING

Introduces skills and knowledge necessary for basic rock climbing, including physical conditioning, climbing technique, belaying, safety, and outdoor ethics. Emphasis on developing skills for lifetime participation in this outdoor fitness activity.

HESC 267-010 ADVENTURE CHALLENGE - LEADERSHIP AND ACTIVITIES

Introduces the concepts of adventure challenge education; a learning process providing intrinsic and extrinsic learning opportunities for individuals and groups. Activities are analyzed and practiced, demonstrating that through appropriate leadership, group and individual goals can be attained.

HESC 667 -010 SEMINAR IN BIOMECHANICS

Critical analysis of selected papers from the scientific literature on human biomechanics, with topical areas chosen to provide an appreciation the breadth of the field. Each student will also select a topic of interest for an in-depth review.

HISTORY

HIST 367-011 TWENTIETH CENTURY FRANCE

Uses primary and secondary sources to explore France's often turbulent 20th century history. Attention given to conflicts which have shaped French society, such as the Dreyfus Affair, the First World War, the Nazi occupation and the Vichy regime, the war in Algeria, the 1968 student riots, and post-war immigration.

HIST 367-012 MODERN JEWISH HISTORY

Covers the period from mid-19th century rebellions in Europe. Focuses on the Jewish role in the idealist and often utopian movements, the middle class, increasing anti-Semitism, and the rise of the Zionist movement. Continues through the two World Wars and the foundation of Israel, through the Yom Kippur War and the treaty between Israel and Egypt.

HIST 367-410 FDR, THE GREAT DEPRESSION, AND THE NEW DEAL

Provides an in-depth look at American political, social and economic history from the stock market crash of 1929 to World War II. Investigates and discusses: labor and the rise of the CIO; consumerism; the influence of Eleanor Roosevelt; crime waves; racial dynamics; American Communism; European influences on social policy; populists and demagogues; and, foreign policy, preparedness and isolationism.

HIST 411-010 SEM: THE HISTORY OF MODERN AMERICAN BUSINESS

Examines the ways in which business and business leaders have played a central role in American life. Explores the development of America's consumer culture, American business abroad, the role of foreign business activities in the U.S., and how McDonalds, Disney, and the Mall came to be our ubiquitous national symbols.

HIST 411-011 SEM: LOOKING LOCALLY, THINKING GLOBALLY

Uses Delaware as a case study for the major issues that have confronted America since the Civil War. Through readings and primary research students will examine topics such as race relations, technological change, the rise of national and international corporations, tourism, and land-use patterns.

HIST 411-012 SEM: NATIVE AMERICAN ACTIVISM IN THE 20TH CENTURY.

Examines the tortuous road from colonial status to self-determination among Native Americans during the 20th century. Examines Indian issues within the larger context of federalism and states rights policy shifts, focusing on the post World War II era. Films and speakers focus on particular Indian communities.

HIST 411-013 SEM: THE NIGHTMARE YEARS 1960-1980

Focuses on American life from the rise of John F. Kennedy to the fall of Jimmy Carter. Focuses on political, social, and diplomatic developments of the period - JFK and American foreign policy (the Bay of Pigs, the Cuban Missile Crisis, Vietnam); LBJ's Asian crusade, the Black Revolution of the 1960's, the youth rebellion and Watergate.

HIST 411-014 SEM: JEFFERSON AND HIS TIME

Examines the life of Thomas Jefferson, covering his early years, his political career and presidency, and his retirement at Monticello. Focus on Jefferson's writings and on modern scholarship concerning the central historical problems of his life, including his role in the Revolution, his political and social thought, his family and private life, his role in American expansion, his position on slavery, and his influence as a figure of power.

HIST 471/671-440, 471-080 SEM: BUILDING CATHEDRALS AND CASTLES

Research seminar in which every student will work intensively on some aspect of the history of some great building. Although we will look closely at some medieval cathedrals in particular, students will be able to work on more modern buildings as well, e.g., the National Cathedral.

HIST 474-010 SEM: ENGLISH HISTORY

Political, constitutional, social and economic development to 1715.

HIST 479/679-430 SEM: THE VIETNAM WAR

Using lectures, discussion, video, and CD music, this course explores the causes, course, and consequences of the Second Indochina War, 1960-1975 (i.e., the "Vietnam War").

INDIVIDUAL AND FAMILY STUDIES

IFST 310-010 PARENTING THROUGH THE LIFESPAN

Applied focus on parenting styles, roles, issues, and goals through the life span. Examines parent diversity, interfaces with schools and community, resources, theoretical perspectives, and developmental needs of children and parents.

IFST 390-080 FAMILIES IN GLOBAL PERSPECTIVES

Interdisciplinary approach to understanding family life across the world, the impact on families in the United States, the heritage of other cultures and influence of current international events. Study of families in comparative cultural terms and issues of family policy that span across national interests. Addresses international organizations and initiatives shaping family life and opportunities and the status of family research and theory across societies.

LEGAL STUDIES

LEST 367- 010 LANGUAGE AND THE LAW: COURT INTERPRETATION IN THE UNITED STATES.

Examines public policy development as well as constitutional and statutory provisions for appointment of interpreters at both the federal and state levels; ethical considerations and linguistic challenges; and potential effects of the U.S. English Organization's efforts to make English the Official Language of the U.S. on court interpretation services.

LINGUISTICS

LING 367- 010 LANGUAGE AND THE LAW: COURT INTERPRETATION IN THE UNITED STATES.

Examines public policy development as well as constitutional and statutory provisions for appointment of interpreters at both the federal and state levels; ethical considerations and linguistic challenges; and potential effects of the U.S. English Organization's efforts to make English the Official Language of the U.S. on court interpretation services.

MARINE STUDIES

MAST 667-010 MARINE ETHNOBOTANY

Explores the use of indigenous marine plants by human coastal cultures for food, medicine, fabrics, shelter, chemicals, fuel, and other needs. Analyzes plant features that result in useful products. Examines characteristics of the relationships between human groups and coastal plants that make the associations sustainable.

MAST 667-011 MARINE TRANSPORTATION POLICY

Provides an overview of marine transportation policy and develops analytical techniques in the contexts of local, national, and international perspectives. Topics include: maritime transportation technology and projected fleet development; overview of policy frameworks affecting trade, safety, and environment; quantitative analysis of shipping business economics under policy constraints.

MECHANICAL ENGINEERING

MEEG 467-010 TWO-PHASE FLOW AND PARTICLE TECHNOLOGY

Modeling mass, momentum, heat transfer, and mixing in particle-laden flows, slurries, and bubbly flows. Particle separation, dispersion, agglomeration, transport and handling. Particle measurements and characterization.

MEEG 667-010 MATERIALOGRAPHY

Optical microscopy: reflected, transmitted and polarized light. Preparation of metals, ceramics, polymers, and composites for microscopic examination: mounting, polishing and etching. Macro and microstructures of typical engineering and other materials. Quantitative microscopy. Optical microscopy in failure analysis.

MEEG 867-010 PLANNING AND CONTROL OF DYNAMIC SYSTEMS

Overview of research methods in planning & optimization of dynamic systems using special underlying structures. Integrates tools from nonlinear systems theory, motion planning, & functional optimization to present new planning paradigms. Applications to robotics, aerospace, vehicles, controlled electromechanical systems, and manufacturing process.

MEEG 867-011 ADVANCED TOPICS IN DYNAMICS

Continuation of MEEG620, covers additional methods of analytical dynamics such as Lagrange equations (holonomic and non-holonomic systems), Kane's method, Hamiltonian formulation, Poincare's theorem, and other energy methods. Extract qualitative information of rigid-body motion, such as stability or long-term predictability. Applications to robotics, mechanisms, celestial mechanics, gyroscopic stabilization.

MUSIC

MUSC 267-080 HONORS FORUM: READING MUSIC, READING CULTURE

A work of music is more than just a collection of sounds and more than a piece of music. It is a document of a culture and it can explain much about that culture. Examines a series of pieces that are reflective of particular persons, events, ideals or cultural structures.

MUSC 367-010 INTRODUCTION TO RECORDING

Covers history of recording and recording technology, recording techniques, which include hands on experience by the students, and the aesthetics of recording and its impact on music through the 20th century. The first semester class lays the foundation for further development of recording projects throughout the year.

PHILOSOPHY

PHIL367-010 TPCS: COMP. PHIL.: DEATH AND DYING

Looks at various, cross-cultural philosophical approaches to death and dying. Concerns the idea that philosophy is a way of preparing for death, and that the good life is the one that ends in a good death.

PHIL 367-011 TPCS: TIME TRAVEL

Examines time travel in its own right, with particular attention to the various ways in which time travel is (or is not) possible. Also examines the connections with the philosophy of time and space, personal identity, freedom of the will, and theism.

PHIL 465-010 SR. SEM: NATURALISM

Research program involving using the methods of science, and those methods alone, in building one's philosophical theories. Explores some of the most convincing reasons for embracing philosophical naturalism and some of naturalism's most troubling consequences.

PLANT SCIENCE

PLSC 367-010 NURSERY PRODUCTION

Two teams of students will plan, manage, produce and sell both container and field grown nursery stock. Each student will have a unique area of responsibility. Each team will select crops, propagate them and be responsible for all aspects of production, and cost accounting, including the sale of crops.

PLSC 367-011 WEED SCIENCE: PRINCIPLES AND APPLICATIONS

Introduction to weed science focusing on applied weed management strategies. Topics include weed definition, herbicide application techniques, background on tillage equipment and cultural control methods, plant and soil system interactions with weeds, and the importance of biotechnology in weed management.

PLSC 367-080 HONORS: CHOCOLATE

What is it about chocolate that makes it so desirable, irresistible, universally appealing and yummy? Explores the deep, dark mysteries associated with the use of chocolate over the millennia. Includes origin, horticulture, chemistry, nutrition, properties or strictly for fun this may be the course for you. Weekly taste test!

PSYCHOLOGY

PSYC 367-010 INTRODUCTION TO NEUROSCIENCE

An interdisciplinary approach to the study of the nervous system. Deals with gross anatomy of the nervous system and the anatomy and physiology of nerve cells. Covers sensory and motor systems, neuroendocrine function, and the neural basis of behavior. Lab included. Prereq: PSYC 201, BISC 208, 2 semesters of Chemistry.

PSYC 367-011 INTRODUCTION TO NEUROSCIENCE LABORATORY

Includes a dissection of a sheep brain, implantation of an electrode into rat brain to map reward function, brain histology, electrophysiological recording to map somatosensory cortex in the rat, recording of the electroretinogram from the frog eye, and software and hardware simulating of neuronal activity. Must be enrolled concurrently in PSYC 314 or previously taken PSYC 314.

PSYC 467-010 BIOPSYCHOLOGY OF ANXIETY/DEPRESSION

Integrates behavior and biology to offer future theoretical and research directions for studying anxiety and depression. Explores neuroanatomy, pharmacology and behavior of anxiety and depression gleaned from experimental studies in both animals and humans. Animal models of anxiety and depression, and their relevance to the human condition will be emphasized.

PSYC 467-011 COGNITIVE NEUROSCIENCE

Examines the relationship between mind and brain. Modern neuroimaging techniques, and advances in cognitive psychology, open new ways to investigate the neural basis of perception, memory, language, and consciousness. Examines these approaches as well as those based on examination of patients with brain damage and neural net modeling.

PSYC 467-012 EMOTIONS AND PREVENTIVE INTERVENTION

Covers the development of emotions, emotion knowledge, and emotion regulation, their relations to adaptation and social behavior. Emotion-centered preventive intervention, including participation in an intervention program for children. Prereq: PSYC 350 AND PSYC 334 OR PSYC 380.

PSYC 467-013 PSYCHOLOGY OF EATING DISORDERS

Covers the study and treatment of disorders such as anorexia, bulimia, and obesity.

PSYC 467-080 HOURS: SOCIAL MOTIVATION

Analysis of theory and research in the social psychology of motivation. Includes active student participation in research projects. Prereq: PSYC 309, and PSYC 303 or 390, and permission of instructor.

PSYC 867-010 INTELLIGENCE AND ACHIEVEMENT

Provides training in the administration and interpretation of the major intelligence and achievement tests used in the assessment of children and adults. Requires permission of instructor.

PSYC 867-012 CURRENT TOPICS IN NEUROSCIENCE

Discussion of current topics in neuroscience.

PSYC 867-013 CURRENT TOPICS IN SOCIAL PSYCHOLOGY

Discussion of current topics in social psychology.

PSYC 867-014 CURRENT TOPICS IN CLINICAL PSYCHOLOGY

Discussion of current topics in clinical psychology.

PSYC 867-015 CURRENT TOPICS IN COGNITION

Discussion of current topics in cognitive psychology.

PSYC 867-016 FIRST YEAR SEMINAR

Introduces students to a number of issues central to their development as psychologists. First and foremost, graduate students and colloquium faculty together discuss conceptual and methodological issues of faculty research programs. In addition, students discuss issues such as ethics, manuscript preparation, grant proposal preparation, and transitions to faculty status. Requires permission of instructor.

SOCIOLOGY

SOCI 467-010/667-011 SOCIAL ASPECTS OF RISK

Focuses on the sociological aspects of risk assessment and management by individuals, organizations and government agencies. While the majority of cases studied involve technological risks, the management of risks from natural hazards and from health risks is also covered.

SOCI 667-010 ENVIRONMENTAL SOCIOLOGY

Produces substantive and theoretical introduction to the major issues of Environmental Sociology. While focusing on issues associated with natural and technological hazard issues, course also looks at influences of the environmental movement and collective responses, and new emerging movements of ecofeminism and environmental justice.

SOCI 667-012 TEACHING IN THE SOCIAL SCIENCES

Primary objective is to stimulate interest in talk about teaching among faculty and graduate students in Psychology, Political Science and Sociology, each of which faces challenges in communicating our disciplines to undergraduates.

STATISTICS

STAT 667-010 APPLIED TIME SERIES ANALYSIS

Methods for modeling and forecasting time series, concentrating on the Box and Jenkins methodology. Emphasis is on the use of statistical time series computer packages and the ideas behind them. Studies include weather, astronomical, biological and economic time series. Prereq: some knowledge of calculus and a previous course in statistics or probability.

URBAN AFFAIRS AND PUBLIC POLICY

UAPP 667-010 REGIONAL WATERSHED MANAGEMENT

Reviews the practical applications of watershed planning as a tool to manage land, water, and ecosystem resources. Explores public policies and practices of watershed planning by examining case studies in water supply, water quality, drought, floodplain, and storm water management in the State of Delaware and the mid-Atlantic region.

UAPP 667-011 CONFLICT RESOLUTION

Combination of theory, skill building and practice. Provides effective communication and problem solving skills for individuals interested in de-escalating conflicts and creating win-win solutions. Students learn new ways of looking at and approaching conflict while gaining a better understanding of their own personal conflict management style and understanding how this transfers to the workplace.

UAPP 667-012 ADMINISTRATIVE LAW AND POLICY

Introduces basic concepts and rules of administrative law and an understanding of the legal issues affecting public and nonprofit organizations dealing with government agencies. Emphasis on administrative and social science issues. Special attention placed on the impact politics has on efforts by administrators to comply with administrative law rules and regulations. No prior legal training or command of legal language is necessary.

UAPP 667-013 QUALITATIVE METHODS FOR PROGRAM EVALUATION

Emphasizes the development of student skills in collecting qualitative data for program evaluation through such methods as observations, interviews, and document reviews. Topics include the philosophical underpinnings of qualitative inquiry, criteria for the quality of qualitative evaluation, and data analysis. Prereq: UAPP800, UAPP819, or UAPP 667.

UAPP 667-014 SUPERVISING A MULTICULTURAL WORKFORCE

Focuses on the changing workforce and the role of the supervisor in a culturally diverse workplace. Includes identifying bias and discrimination in employment; barriers to the full participation of minority groups in the employment system; and how the effective supervisor can open opportunities within the employment system and further a multicultural work environment.

UAPP 667-015 EFFECTIVELY MANAGING VOLUNTEERS

Provides an introduction and overview of the field of volunteer administration, explores the components of the effective management of volunteers and builds students' problem solving skills. Discussions include comparisons to the management of paid staff and the role of volunteerism in larger organizational structures.

UAPP 667-016 INFORMATION TECHNOLOGY IN THE PUBLIC & NONPROFIT SECTOR

Introduces students to the issues surrounding IT Infrastructure in the public and nonprofit sectors. Focuses on three themes that impact the adoption, implementation and evaluation of IT efforts: technology, policy, and administration.

UAPP 667-017 FUND DEVELOPMENT FOR NONPROFIT ORGANIZATIONS

Deals with fund development for nonprofit organizations. Includes how to manage and govern a nonprofit organization to have success in fund development.

UAPP 667-018 ENVIRONMENT, SOCIETY AND ENGINEERING

Reviews current environmental issues of global interest with an emphasis on scientific understanding of the problems and engineering approaches to them and how science and engineering perspectives may enhance or complicate policy making. Course will help students understand environmental problems from a multidisciplinary and holistic approach.

UAPP 685-010 PERFORMANCE MANAGEMENT

Focuses on managing for results and performance measurement at the level of the program or organization and on training & development for employees in order to achieve the desired performance results. Linking these two levels - the organization with the individual staff person -- will mark the most successful managers in today's environment.

UAPP 867-010 APPLIED HEALTH DEMOGRAPHY AND HEALTH STATISTICS

An intermediate level applied course covering vital statistics and demography, including rates and ratios, life tables, mortality, natality, age adjustment, survey analysis, regression techniques, (including logistic regression), and synthetic estimation for small geographic areas.

WOMENS STUDIES

WOMS 250-410 TPCS: INTERNATIONAL WOMEN'S STUDIES

Examines the history of women in Asia and Africa emphasizing the experience of economic development and "modernization" and how this affects the status of women. Evaluates concepts of influence, power and authority of women in different cultures. Explores the phenomenon of women-heads-of-state, comparing the recent American experience with that of Asia and Africa.

WOMS 267-440 WOMEN IN LEADERSHIP IN THE ARTS

A brief introduction to artists and writers active in leadership roles. Speakers will discuss their careers as artists/writers. Students are encouraged to visit art galleries and museums and will interview an artist or writer.