

CATALOG SUPPLEMENTAL COURSE DESCRIPTIONS

ANTHROPOLOGY

ANTH 267-010 ANTHROPOLOGY OF DEATH

Explores the topic of death from the perspectives of the various sub-disciplines of anthropology. Includes cross-cultural comparisons of death rituals, grieving, and religious beliefs; analyses of prehistoric mortuary practices; the biology of dying; forensics; and ethical issues in our own society.

ANTH 367-010 ANTHROPOLOGY & BUSINESS

How culture affects business and capitalism in our society and in other societies worldwide--and how modern capitalist life affects culture. Looks at business and enterprise and the nature of diverse work cultures from direct-sales organizations to dot.coms and from street-vendor businesses to mega-corporations. Examines the role of working women in different cultures.

ARTS & SCIENCE

ARSC 167-010 HOW TO SELECT A MAJOR

Teaches sophomore undecided students the skills and tools needed to identify a career path and the academic majors and enrichment activities that will lead down that path. Culminates with selection of courses for next semester.

ARSC 267-010/WOMS 267-010 INTRO TO SEXUALITIES & GENDER

Variations in the social construction of lesbian, gay, bisexual, transsexual, trans-gendered and queer identities in contemporary American society by a cultural study of gay literature, history, theory, religious, legal, and medical issues, and the arts (classical/traditional, contemporary and popular) including film, music, dance, performance, television, theatre and the visual arts.

ART HISTORY

ARTH 402-010 SEM: ART & RELIGION IN LATIN AMERICA

Explores the impact of contrasting religious traditions—Amerindian, African and European—in the artistic production of Spanish America. A broad range of artworks created from 1492 to the present will be analyzed according to the particular religious system(s) in which they were created.

ARTH 405-010/605-010 SEM: MEMORIALS TO THE ROMAN DEAD

Explores the wide-ranging means through which Romans of different social classes and locales commemorated the dead from the Late Republic to the Early Christian period. Investigations include evidence of funerary rituals, the role of the living in perpetuating memory, and issues of self-representation.

ARTH 621-010 SEM: LATE CLASSICISM & THE MEDITERRANEAN

Employing a post-colonial theoretical framework, this seminar explores the resurgence and significance of a late form of classicism (1850s - 1900s) in the arts of England, France, and Germany, and the response it generated in the “classical” nations bordering the Mediterranean, Italy and Greece.

ARTH 667-010 SEM: FREUD, PSYCHOANALYSIS & COLONIALISM

Focuses on select work by Freud including *The Interpretation of Dreams* and *Totem and Taboo*, and reads adjacent key subsequent works (some quite recent) on colonialism and culture by Frantz Fanon, Gilles Deleuze, Edward Said, and Ranjana Khanna.

ARTH 667-011 SEM: TOWN HOUSE IN ENGLAND & AMERICA

Explores 18th- and 19th-century urban housing in the age of mercantilism and industrialization. Focuses on architecture, decorative arts, and lifestyle in cities from Charleston, SC, to Portsmouth, NH, in the United States and from Bristol to Hull in England.

ARTH 667-012 HISTORIES & THEORIES OF MODERN PORTRAITURE

Histories and theories of modern portraiture in the context of changing ideas of identity, individuality, subjectivity, and the self. Topics include political, socio-historical, and documentary functions; physiognomy; likeness; self-portraiture; photographic processes and mechanical reproduction; celebrity; gender; sexuality; abstraction; masking; avant-gardism; and appropriation.

BIOLOGICAL SCIENCES

BISC 467/667-010 CANCER BIOLOGY

Key concepts in cancer epidemiology, development, progression, and therapy. Students read, comprehend and present instructor selected scientific papers in the field of cancer research.

BISC 667-011,012 BIOLOGICAL STATISTICS

Focuses on the statistical techniques commonly used by biologists. Uses analyses of biological data. Emphasis on skills; deciding which statistical technique is appropriate for a given experiment and interpreting the results of the statistical test.

CHEMICAL ENGINEERING

CHEG 467-011 / CHEM 467-011 BIOCHEMISTRY & BIOTECHNOLOGY LABORATORY

Techniques in basic molecular biology and protein production: sub-cloning, PCR, mutagenesis, protein expression and purification. Students perform biochemical and biophysical measurements to characterize the proteins they have made.

CHEG 667-010 BIOLOGICAL DATA: MINING & MODELING

Introduces biological databases, algorithms and tools to analyze and compare data, inter- and intra-database relationships, genomic data-marts and warehouses, various algorithms, verbal models, quantitative models, modeling and simulation of genetic and metabolic networks, in silico cells etc. Includes lab sessions. Preliminary knowledge of programming is desirable.

CHEG 667-012 MOLECULAR BIOPHYSICS

Biophysical principles and methods: thermodynamic and kinetic analysis of folding, protein-nucleic acid interactions, and ligand binding; spectroscopy; structural methods and modeling; calorimetry; ultracentrifugation and SPR; imaging and microscopy. Problem solving in macromolecular interactions and function: protein refolding; altering ligand affinity; increasing protein stability; drug design and HTS; protein expression and solubility; and protein engineering.

CHEG 667-013, 014/ BISC 667-013/BUAD 667-013/PLSC 667-014/CHEM 667-014/MSEG 667-014 MULTIDISCIPLINARY BIOTECHNOLOGY

Facilitates learning skills for solving broad technological challenges via teamwork in science, engineering, and business administration. Industrial and academic speakers are featured lecturers. A term research project with team effort on written and oral components reinforces course objectives.

CHEG 867-011 CHEMICAL ENGINEERING PRINCIPLES

Equips incoming graduate students with the necessary applied mathematical background emerging from a discussion of Chemical Engineering Principles in Kinetics, Thermodynamics, and Transport phenomena. Covers linear algebra, ordinary differential equations, and stochastic differential equations. Uses prototype chemical engineering problems. Introduces and uses computational software, such as Matlab, to solve more complex problems.

CHEG 867-012 ADVANCED MOLECULAR BIOPHYSICS

Biophysical principles and methods: thermodynamic and kinetic analysis of folding, protein-nucleic acid interactions, and ligand binding; spectroscopy; structural methods and modeling; calorimetry; ultracentrifugation and SPR; imaging and microscopy. Problem solving in macromolecular interactions and function: protein refolding; altering ligand affinity; increasing protein stability; drug design and HTS; protein expression and solubility; and protein engineering.

CHEMISTRY

CHEM 667-010 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. Prereq: CHEM 331/333, CHEM 332/334, or permission of instructor.

CHEM 667-011 INTRODUCTION TO RESEARCH AT THE CHEMISTRY-BIOLOGY INTERFACE

Research experiences in molecular biology, bio-analytical chemistry, bio-organic chemistry, computational chemistry, biochemical engineering, bio-inorganic chemistry, protein crystallography, agricultural biochemistry, virology, and cell biology. Attendance at the weekly Chemistry-Biology Interface Seminar is required.

CHEM 850-010 TPCS: SOLID STATE CHEMISTRY

Brief survey of the recent developments in solid state chemistry. Provides treatment of the most common chemical structures of solids, as well as the relationship between basic properties and structure. Deals with the basic methods used for structural characterization of solids.

CHEM 874-010 TPCS: SURFACE STRUCTURE & CHEMISTRY

Basics of the structure of solid surfaces and surface analytical techniques. Combines traditional lectures with hands-on laboratory work in state-of-the-art surface science laboratory equipped with multiple spectroscopic techniques. The laboratory work will follow the lectures and discussions.

CIVIL AND ENVIRONMENTAL ENGINEERING

CIEG 467/667-010 PAVEMENT ANALYSIS & DESIGN

Presents the scientific principles of pavement design as applied to airfields and highway pavements, considering loading conditions, stress distribution, and properties of various components of pavements layers, for both rigid and flexible pavements. Equips students for the task of designing both flexible and rigid pavements; understanding and using AASHTO pavement design guide, PCA (concrete pavement) design guide, Asphalt Institute (flexible pavement) design guide and FAA airfield design guide.

CIEG 467/667-012 TRAFFIC ENGINEERING

Covers urban and rural flow and aspects of traffic engineering including capacity, delay and queue length analysis. Includes traffic flow characteristics and relationship between flow parameters, fluctuations of flow, capacity concepts, gap acceptance, sight distance requirements for highways and intersections, flow characteristics on freeways, two lane highways, capacity delay and queue length analysis at intersections, characteristics of pedestrian flow and bicycle facilities.

CIEG 667-011 EUTROPHICATION & SEDIMENT FLUX MODELING

Eutrophication models: carbon, nitrogen, phosphorus and silica mass balances; chlorophyll, primary production and dissolved oxygen; multiple species; annual simulations; computational models available; application to lakes and estuaries. Sediment flux models: organic matter diagenesis; ammonia, nitrate, oxygen, phosphorus and silica flux models; computational implementations; application to freshwater and marine sediments. Integrated hydrodynamic, eutrophication and sediment flux models; the state of the art.

CIEG 667-014 DEEP FOUNDATIONS

Addresses the application, selection, design, construction and inspection of deep foundations. Examines driven piles, drilled shafts, and micropiles. Includes development of cost comparisons, specifications, contract documents and bidding practices.

COMPUTER AND INFORMATION SCIENCES

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. Prereq: CISC260 and CISC360, and a knowledge of C.

CISC 459-010 TPSC: NETWORK & SYSTEM SECURITY

In depth look at concepts essential in maintaining a secure network of computers connected to the Internet. Topics include information security, classic/common exploits and how to prevent them, buffer overflows, cryptography, and others. Prereq: CISC361

CISC 467/667-010 INTRODUCTION TO BIOINFORMATICS

Introduction to concepts, methodologies, and tools in bioinformatics. Abstraction of biological problems so they can be solved computationally. Includes: genome sequencing and assembly, bio-sequence, comparison and database search, dynamics programming, hidden Markov models, and phylogenetic trees.

Prereq: CISC220

CISC479-010/011 TPCS: SYSTEMS ADMINISTRATION

Introduces the internals of UNIX, trouble-shooting system and network problems, hardware and software configuration and installation, and security aspects of hosts on the Internet. Multi-operating system integration will also be discussed. Prereq: CISC361 (C or better)

CISC 849-011 APPLICATIONS IN COMPUTER VISION

Offers advanced material in computer vision with a focus towards elected applications. Projects in the class are aimed at exploiting the theoretical computer vision knowledge and applying them to a set of relevant imagery.

CISC 879-011 TPCS: GRID COMPUTING

A distributed computing paradigm originating from wide-area, high-performance computing. Grid computing has been the subject of much research and discussion and has become broader than its original focus. Covers major areas of research in Grid computing and attempts to place these areas in the larger context of distributed computing.

COMMUNICATIONS

COMM 310-080 HNRS: TPSC: GENDER ISSUES IN MASS COMMUNICATIONS

Examines gender as it relates to issues in mass communication, looking particularly at the images of men and women in television programs, commercials, and print advertising.

COMM 318-440 TPCS: HISTORY OF MASS COMMUNICATION ON DELMARVA

History of mass communication on the Delmarva Peninsula from the colonial-era to the present. From the printing press to the internet, it examines newspapers, telegraphy, photography, motion pictures, and the rise of radio and television.

COMM 320-080 TPCS: HNRS: INTRODUCTION TO SMALL GROUP DISCUSSION

Theory and practice in group discussion. Topics include decision-making, cohesiveness, conflict, conformity and deviance, and social influence.

COMM 418/618-010 TPCS: PUBLIC OPINION & COMMUNICATION

Introduction to the nature and measurement of public opinion. Focuses on; the role of mass and interpersonal communication in the formation of public opinion; processes of opinion formation, change, and reinforcement; and approaches to analyzing public opinion.

COMM 442/642-010 TPCS: THEORY & RESEARCH IN GROUP DISCUSSION

An examination of theory and research in some key areas of study in group discussion, including practice in performing group communication research. Emphasizes the role, if any, the content and structure of communication plays in discussion outcomes.

CRIMINAL JUSTICE

CRJU 367-010 COMPARATIVE CRIMINAL JUSTICE

Examines legal systems in several nations and international tribunals. Compares their structure and jurisdiction as well as the varied meanings of justice and rights.

CRJU 367-194,195 ISSUES IN CRIMINAL JUSTICE

Critical examination of theoretical positions dominating criminal justice policy in the United States over the past thirty years. Examines specific practices and policies, determining pragmatically which policies are successful and what potential alternatives exist to unsuccessful policies.

CRJU 467-010/SOCI 467-010/BAMS 467-010 HATE CRIMES

Explores the causes, penalties, and constitutional issues revolving around hate crimes and resulting laws. Includes collaborative and problem-based learning.

ECONOMICS

ECON 267-010/POSC 267-010 CIVICS & ECONOMICS FOR ELEM EDUC

Designed to provide elementary teacher candidates with an understanding of the fundamental content and concepts in the core social studies subjects of civics and economics as they relate to instruction in grades K-8. Attention will also be given to how the content and concepts in these two subject areas might be taught in elementary classrooms.

ECON 367-050 ECON/ENTREPRENEURSHIP OF BUSINESS

Analyzes the economic environment and the impact of public policy on the business behavior and development. Students will develop a business for a day and a business plan.

ECON 467-010 INTERNET ECONOMICS

Uses economic theory to analyze the structure of Internet markets and the strategic interactions between participants in these markets. Important results from the Industrial Organization literature are utilized to investigate sources of competitive advantage and monopoly power, pricing practices, network externalities, technological standards, search and other economic issues relevant to the Internet and e-commerce.

EDUCATION

EDUC 867-011 EDUCATION & THE LATINO/A DIASPORA

Explores both the education about Latinos/as and of Latinos/as in the US within a broad historical, cultural, and sociopolitical framework. Investigates and interrogates texts and images that inform representations and cultural productions of Latino/a identities and communities. Explores issues and dilemmas regarding the schooling of Latinos/as in the U.S. educational system.

ELECTRICAL ENGINEERING

ELEG 367-010 DIGITAL PHOTO/VIDEO AND TECHNOLOGY

Explores deeply into DP/V and other technologies. Compliments and enhances curriculums for majors in technology education, engineering technology, communication, journalism, business administrations. Knowledge of college physics and algebra required.

ELEG 367-011 DIGITAL PHOTO/VIDEO

Teaches how to make better photos and videos with digital cameras and camcorders and to put them on CD/DCV and/or DVD. No Prerequisites.

ELEG 467/667-011 OPTICAL PROPERTIES OF SOLIDS

Presents the underlying principles of optical propagation and absorption in solids, including insulators, metals, semiconductors, low dimensional solids (quantum wells, wires, and dots), as well as stratified (thin-film) media, optical filters, and electro-optic devices.

ELEG 467-012/CPEG467-012 SOFTWARE AND SYSTEM IMPLEMENTATION WITH DIGITAL SIGNAL PROCESSORS

Introduction to digital signal processors for algorithm implementation and interfacing for embedded applications. Emphasizes real-time programming techniques and Input/Output including ADC, DAC, digital I/O, and parallel and serial communications. Reviews signal processing and the software implementation of theoretical constructs.

ELEG 467/667-018/PHYS 667-018 SPINTRONICS

Introduction to the fundamental physics and applications utilizing electron spin in solid state devices. Covers relevant aspects of transport and coherence for topics such as magnetic field sensors and quantum computation. Prereq: Introductory courses in solid state physics and quantum mechanics.

ELEG 667-010 PHYSICAL PROPERTIES OF MATERIALS

Basic models of electrical, magnetic optical and thermal properties of solid materials. Introduction to quantum physics to describe electronic structure of atoms, atomic bonds and crystals. Electronic, magnetic and optical effects in metals, semiconductors, ceramics, polymers and amorphous materials. Operation of basic electronic devices and semiconductor .

ELEG 667-016/MSEG 667-016 SOLID STATE NANOELECTRONICS

Develop principles of solid state physics underlying nanoelectronic device operation. Includes semiconductors, dielectrics, polymers, magnetism, superconductors, biomaterials and nanophase materials. Phenomena include quasiparticle excitations, defects, Boltzmann transport, and the thermodynamics of materials. Concepts will be described in terms of applications for nanotechnology.

ELEG 867-011 INFORMATION THEORY

Introduces the main ideas and concepts of information theory from the perspective of communications. Information theory establishes the theoretical limits that can be achieved in communications systems, and provides insights about how to achieve these limits in practical systems.

FOOD SCIENCE

FOSC 367-010 FOOD BORNE DISEASES: INVESTIGATING VIRAL & PARASITIC OUTBREAKS

Critical review of food borne and water borne outbreaks of viral and parasitic origin. Presents current issues in light of developments related to food safety and public health. Emphasis on factors that influence the outcome of an outbreak, including: emerging pathogens, virulence factors, epidemiological techniques, rapid detection methods, and quantitative risk assessment.

GEOGRAPHY

GEOG 367-010 ENVIRONMENTAL VIDEOGRAPHY

Blends geographical inquiry and electronic storytelling. Research and produce short video documentaries on local environmental and social issues. Investigate spatial distribution, science and politics involved in resource management and social policy. Learn the techniques of video field-production. Research, write, shoot and edit stories, producing effective video communication. Co-req: GEOG235 and GEOG315 or permission of instructor.

GEOG 667-011 PROSEMINAR I

Reviews the contemporary structure of the geographic discipline, and its theories and approaches to inquiry. Surveys the discipline's historical development. Introduces bibliographic and electronic literature searches, as well as how to formulate a research question and organize research into that question.

GERMAN

GRMN 467/667-010 GERMAN LITERATURE: 1945-1989

Examines literature from the end of WWII to the fall of the Berlin Wall. Readings include works by Heinrich Boell, Guenter Grass, Christa Wolf, Ingeborg Bachmann, and others.

HEALTH AND EXERCISE SCIENCES

HESC 667-010 SURVEY RESEARCH METHODS

Emphasis on procedures for designing survey based research studies, including choice of subjects, development of proper instrumentation, statistical design and analysis, and formulation of proposals appropriate for publication.

HESC 667-011 PRINCIPLES OF SPORT BUSINESS & FINANCE

Provides a solid foundation in financial management, managerial economics, and statistics as they relate to the sport industry. Focuses on using financial information to analyze the success of sport organizations. Includes long-term financing, budgeting, and asset allocation. Covers supply/demand, pricing, and market structure.

HISTORY

HIST 367-011 AMERICAN SPORTS HISTORY

Traces major developments in American sports history since the Civil War. Includes lectures, videos, class discussion, two exams, and a paper.

HIST 367-012 SEM: WOMEN, REVOLUTION & SOCIETY IN LATIN AMERICA

Introduces students to Latin American women's history from the late colonial era to the national period. Throughout this vast region, women have organized around issues ranging from citizenship, work, poverty, family, human rights, race, and ethnicity.

HIST 367-410 DELAWARE, FROM JACKSON TO LINCOLN

Delaware History from the 1820s until the end of the Civil War. Examines the Second Party System, the decline of slavery, the transformation of the landscape, the early Industrial Revolution, and the relationship of Delaware to national developments.

HIST 367-411 WORLD WAR II: THE EUROPEAN THEATRE

Lecture-discussion tackles major topics of the Second World War in the European theatre. Chronological examination of its history, interspersed with thematic presentations. Assessment based on a mid-term and a final essay, a research paper, and class participation.

ITALIAN

ITAL 367-010,080 SURVEY OF ITALIAN THEATRE

Selected readings, with discussion and analysis of the various genres of theatre (comedy, tragedy, drama) from the "commedia dell'arte" to the present. Authors may include Goldoni, Gozzi, Peppino De Filippo, Eduardo De Filippo, Dario Fo. Also examines the evolution of the Music in Italy.

LIBERAL STUDIES

MALS 626-010 STDS: TWENTIETH CENTURY AMERICAN LITERATURE

Examines narrative and thematic concerns in American fiction written both after and before World War II. Explored against a background of cultural, philosophical, and literary trends.

MALS 667-010 THE USES & ABUSES OF PUNISHMENT

Examines the philosophical, historical, psychological, sociological, legal, and literary approaches, among others, to pondering what arguably have always been the five most important questions in criminology:

Why do we punish? What do we punish? Who do we punish? How do we punish? How much do we punish?

MALS 667-011 OWNING THE BOOK OF LIFE

Read and discuss the works of Merton, Nelkin, Zuckerman and others to explore the scientific, social and intellectual issues raised by both the iconography of the gene and the claims of ownership of human genes.

MALS 667-410 AMERICAN FAMILIES IN THE NEW MILLENNIUM: THE CHALLENGES OF WORK, DIVERSITY, & AGING

Examines causes and consequences of the recent demographic trends and social changes taking place in American families by providing a context for understanding the impact of history, culture, economics, politics, and globalization on family development. Emphasizes differences between families based on gender, race, ethnicity, and socio-economic status.

MALS 667-430 "A HOUSE DIVIDED: REVISITING THE CIVIL WAR"

Examines the significant role military personalities and institutions played in Civil War America. Explores a variety of topics, including military tactics and strategy, the nexus between military operations and politics, the impacts of warfare on the civil population, the notion of the citizen-soldier, and Delaware's involvement in that conflict.

MARINE STUDIES

MAST 827-010 TPCS: FISH BIOLOGY

A group discussion/seminar focusing on current topics in fish biology and fisheries research. Students lead discussions by representing topical seminars, critiquing research papers from the current literature, or presenting their thesis or dissertation research.

MAST 827-011 TPS: LARVAL ECOLOGY

Critical evaluations of recent literature in the field. Consists of structured discussions. Each student will lead at least one discussion during tenure of the course.

MATH

MATH 267-010 GEOMETRY FOR MIDDLE SCHOOL TEACHERS

Supports the teaching of geometry in the middle school through the exploration of geometric concepts, reasoning in deductive systems, and selected topics in Euclidean geometry. Activities include the use of computer geometry software. Must be pursuing middle school mathematics certification to enroll.

MATH 467-010 CURVES/SURFACES IN GEOMETRIC MODELING

Theory and applications of using curves and surfaces to model a geometric object. Topics include splines and patches in curve and surface fitting. Preq: MATH243 and basic knowledge on matrices.

MATH 567-010 FOUNDATIONS OF MATHEMATICS I

Numbers, integers, rationals, real, complex, quaternions, continuous fractions, polynomial equations. Using a ruler and/or compass. Analytical method in geometry and Maple. Useful curves and surfaces. The notion of an invariant in mathematics and physics, and its use. Transformations in geometry: affine, projective, inversion. Bolyai-Gerwin theorem. The Third Hilbert's problem: solution and methodological value.

MECHANICAL ENGINEERING

MEEG 667-010 DROPS, BUBBLES, FILMS & OTHER INTERFACIAL PHENOMENA

Answers such questions as; Why small drops stay attached to windshields? How the formation of foam can be avoided in dishwashers? And, how leaves can be wetted optimally during the application of insecticides while preventing the formation of drops on the soil?

MATERIALS SCIENCE ENGINEERING

MSEG 667-011 INTRODUCTION TO SCIENCE AND ENGINEERING POLYMER SYSTEM

Provides an understanding of the science and engineering of macromolecules from a structure/property perspective. Includes polymerization, chain structure and configuration, polymer size, shape, phase separation behavior, amorphous and crystalline state, glass-rubber transition, cross linking/rubber elasticity, viscoelasticity, rheology and mechanical behavior.

MSEG 667-015/PHYS 667-015 THIN FILM PROCESSES

Includes concepts of vacuum science and all major physical and chemical vapor deposition processes. The growth of the films will be described on the basis of thermodynamics and kinetics principles. Discusses the primary techniques for thin film characterization. Covers physical properties, optical, electrical, mechanical, etc., and the related applications of thin films.

MUSIC

MUSC 667-010 VOCAL PEDAGOGY

Advanced study of the anatomy, physiology and acoustics of the singing voice. Study includes independent research on a current topic in vocal pedagogy.

NUTRITION AND DIETETICS

NTDT 667-012/HESC 667-012 PHYSICAL ACTIVITY, NUTRITION & SKELETAL HEALTH

Examination of the role of physical activity and nutrition in the development and maintenance of the skeleton.

NURSING

NURS 667-194,195 ADULT HEALTH & DEVELOPMENT

Health-related issues of older adults, including healthcare in a changing system, political, legal and ethical issues, and coping with loss/end of life. Exposure to leaders in the healthcare of older adults through attendance at such events as conferences and workshops.

PHILOSOPHY

PHIL 367-010 TPCS: BUDDHISM

Examines variety of philosophical positions and methodologies found within the Buddhist traditions in India, China, Japan, and Tibet. Students read mostly primary materials, with the goal to articulate the complexity and diversity of this rich tradition of philosophical and psychological analysis.

PHIL 465-010,080 SR. SEM: COERCION & EXPLOITATION

Examines recent analysis of two key moral concepts. Sample issues: What is coercion? When, if ever, is it justified? Can desperate circumstances coerce you, or only people? What should the moral and legal implications of a coercion claim be? Does exploitation require coercion? Can a consensual, mutually profitable bargain ever be unfair? Special attention throughout to the case of sweatshop labor.

PHYSICS & ASTRONOMY

PHYS 467/667-010 OBSERVATIONAL ASTRONOMY

Focuses on the techniques and analysis of astronomical observation, with emphasis on CCD imaging. Includes celestial coordinates, telescope handling, CCDs, data reduction, and data analysis.

PHYS 667-011 INTRO TO BASIC VACUUM TECHNOLOGY

Introduces concepts of vacuum technology through the use of kinetic theory of gases. Discusses flow, conductance and vacuum system design. Examines different types of pumps, gauges, and valves in terms of how they operate and their advantages and disadvantages.

PHYS 667-012 QUANTUM COMPUTATION

Introduction to quantum computation and quantum information. Quantum logic gates and quantum circuits. Efficient quantum algorithms: quantum Fourier transform and its applications and quantum search algorithms. Physical implementations of quantum computation. Quantum error-correction and fault-tolerant quantum computation. Quantum cryptography

PLANT SCIENCE

PLSC 267-010 LANDSCAPE PRESENTATION GRAPHICS

Graphic techniques for presentation of landscape designs, including plans, sections, elevations, sketches and perspectives. Uses drawing methods such as pencil, ink, pastels, watercolor and computerized programs.

PLSC 667-010 ADVANCED PLANT GENETICS

Advanced survey of genetics in higher plants, including molecular methods of plant biotechnology. Includes genome composition and evolution, disease resistance, transposable elements and retrotransposons, DNA methylation and epigenetics, quantitative traits, chromosome structure and gene expression. Prereq: PLSC 300 and PLSC 306.

POLITICAL SCIENCE

POSC 467-010,080/COMM467-010,080/ENGL 467-010,080 ROAD TO THE PRESIDENCY

During the final months of the 2004 election season, students actively explore the conduct of the campaign from the points of view of candidates, media and public, fitting the current campaign into the history of American politics

PSYCHOLOGY

PSYC 367-010 INTRODUCTION TO NEUROSCIENCE

An interdisciplinary approach to the study of the nervous system. Fundamentals of Neuroscience, deals with gross anatomy of the nervous system and the anatomy and physiology of nerve cells. Integrative Neuroscience, covers sensory and motor systems, neuroendocrine function, and the neural basis of behavior. Prereq: PSYC 100, BISC 208, 2 semesters of chemistry.

PSYC 467-010 COGNITION & EMOTION

Focuses on the interplay between affective and cognitive processes--how feelings influence thought, and vice-versa. Includes the relationships between thinking, feeling, and the brain; how feelings might be related to self-consciousness; and how cognitive processes are altered in emotional disorders.

PSYC 467-011 PSYCHOLOGY OF CONSCIOUSNESS

Focuses on subjective experiences (raw feelings, self awareness, free will); comparisons of normal and altered states of consciousness; cognitive science theories of the roles and integration of conscious and subconscious processes; and philosophical perspectives on the nature of consciousness.

PSYC 467-013 FAMILY RELATIONS

Focuses upon the changing nature of family relationships across the life-span. Includes an examination of major theoretical perspectives governing the study of the family as well as relevant topical issues such as courtship, parenting, divorce, violence, work, poverty and aging.

PSYC 667-011 EARLY PERCEPTUAL-COGNITIVE DEVELOPMENT

Provides an overview of selected aspects of perceptual and cognitive development during the first two years of life. Places special emphasis on the issue of how infants acquire knowledge. Considers a range of theoretical descriptions of infant development.

PSYC 667-012 IDEAS IN BIOPSYCHOLOGY

Required readings of “classics” in psychology, biology, and philosophy. Student led discussion on readings. The reading list is flexible and will be chosen depending on the interests of the students.

SOCIOLOGY

SOCI 267-010 RESEARCH ON ALCOHOL

Scholars, administrators, and clinicians from off-campus and from the UD community present and discuss their research and experiences with issues of alcohol use and abuse. Focuses on the use of alcohol on college campuses and the impact of high risk drinking on the college and neighboring communities.

SOCI 467-080/WOMS 467-080 GENDER, AGING & THE LIFE COURSE

A study of women’s and men’s lives from the point of view of men and women in their 80’s and in their 60’s. Includes in depth interviews with persons in each age group. Uses a life course perspective to understand the process of aging for each gender.

SOCI 667-010 THE SOCIOLOGY OF DRUG & ALCOHOL ABUSE

Reviews sociological theory and research on alcohol and drug use and the social control of alcohol and drug use. Contrasts the sociological approach to understanding substance to biological and psychological explanations. Includes history of US laws, etiology, trends, age, race and gender, prevention, treatment, crime and control.

SOCI 667-011 ENVIRONMENTAL SOCIOLOGY

Produces substantive and theoretical introduction to the major issues of Environmental Sociology. Focuses on issues associated with natural and technological hazards. Examines influences of the environmental movement and collective responses, and new emerging movements of ecofeminism and environmental justice.

SOCI 667-012 STUDYING VIOLENCE: A RESEARCH EXPERIENCE

Covers the epidemiology of interpersonal violence in America and the theories that have been used to explain it. Students required to conduct original research, testing a theory of violence using available data.

STATISTICS

STAT 667-010 SURVIVAL ANALYSIS

Statistical techniques used in the analysis of censored data including the Kaplan-Meier estimator, the analysis of one, two and K sample problems, and regression analysis based on the Cox proportional hazards model.

URBAN AFFAIRS & PUBLIC POLICY

UAPP 667-011 TOPICS IN LOGISTIC REGRESSION

Introduces the theory and application of logistic regression. Emphasizes applications in health and social policy research. Includes computer laboratory exercises employing SPSS. Prereq: Familiarity with correlation and regression methods, including multiple regression, regression diagnostics, and SPSS.

UAPP 667-012 MYERS BRIGGS & YOUR PERSONAL DEVELOPMENT

An introduction to the use of the Myers-Briggs instrument as a means of enhancing your own personal development and leadership. Includes understanding who you are: your gifts and your development potential, enhancing communication, improving your response to conflict, type dynamics, leadership and valuing the gifts others bring to your organizations.

UAPP 667-013 CIVIC ENGAGEMENT

Examines how to successfully foster civic engagement to achieve demonstrable results in community improvement. Utilizes case studies to examine various dimensions of involving community stakeholders, from initiating action to assessing performance and institutionalizing change. Emphasis on how government services can be made more responsive to community-defined needs and priorities.

UAPP 667-016 INFORMATION TECHNOLOGY IN PUBLIC & NONPROFIT SECTORS

Introduction 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 TECHNOLOGY PLANNING FOR GOVERNMENT & NONPROFIT ORGANIZATIONS

Focuses on how to best utilize technology to further your organization's mission. Includes assessing existing resources, identifying technology needs, and selecting cost-effective solutions that will minimize crises and maximize efficiency.

UAPP 667-018 VOLUNTEER MANAGEMENT

Provides an introduction and overview of the field of volunteer administration, explore the components of the effective management of volunteers and build students' problem-solving skills. Includes comparisons to the management of paid staff and the role of volunteerism in larger organizational structure.

UAPP 667-019 HISTORIC ROADSIDE ARCHITECTURE

Explores the development of roadside architecture that emerged in the twentieth century to support and enhance the automobile culture and the rapidly developing tourism industry in this country. Examines highways, food and beverage, lodging, auto service and amusement sites and their preservation.

UAPP 667-021 DATA FOR DECISIONS & POLICY

Provides students with data methodology for decision making and policy formulation. Covers acquiring and processing of raw data and its compilation into datasets, how to generate data output, accessing internet databases, transferring data between applications, using SAS to process and clean data, and tools for presenting data. Focuses on problem solving in a lab.

UAPP 867-010 SEMINAR IN PUBLIC ADMINISTRATION RESEARCH

Explores scope, substantive issues, methodological approaches, and journals of research in the field of public administration. Introduces students to University faculty research in public administration. Expects students to work toward writing a paper for submission to a journal in the field.

WOMEN'S STUDIES**WOMS 267-011 WOMEN IN GLOBAL PERSPECTIVE THROUGH FILM**

Explores women's experience through five feature films. Students view the films, read a short article pertaining to each film and discuss and/or react to the themes and issues suggested by the film.