

SPRING 2003 CATALOG SUPPLEMENTAL COURSE DESCRIPTIONS

This section is the supplement to the current undergraduate and graduate catalogs.
Courses not found nor fully described in the 2002-03 catalog are printed here.

AMERICAN MATERIAL CULTURE STUDIES

AMCS 267-010/ARTH 267-010 HISTORY OF 20TH CENTURY DESIGN

Explores design since the industrial revolution, including architecture, graphics, fashion, and the human body. Students will gain a basic literacy in designers, movements, and styles, consider the effects of gender, class, and ethnicity, conduct research, and analyze their personal environments.

ANTHROPOLOGY

ANTH 267-010 CLQ: CURRENT RESEARCH IN ANTHROPOLOGY

A lecture series, primarily for anthropology majors, on the methods, theories, and results stemming from current research in the discipline.

ANTH 367-010, 080 HISTORICAL ARCHAEOLOGY OF AMERICAN BATTLEFIELDS

Represents the material culture interpretation of selected historical conflicts, emphasizing the American war sites. Topics include the traumatic effect of military occupation, the experience of a broad spectrum of social and ethnic groups in battle, and the material evidence of armed struggle. Includes a material culture perspective of the wars of the twentieth century. Emphasizes the commonality of behavior by individuals subjected to war.

ANTH 390-080 HNRS CLQ: US & THE OTHER

Examines the culture of indigenous groups and ethnic minorities who are incorporated in contemporary or state societies worldwide. Explores culture change and continuity with valued traditions. Considers how perceptions of "the other" are shaped by the larger cultural content.

ANTH 390-081 HNRS CLQ: INTERPRETING THE PAST

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

ART HISTORY

ARTH 402-010 SEM: FROM THE SALON DES REFUSES TO SENSATION

Traces the history of the modern art exhibition from the late 19th century to the present.

ARTH 402-011 SEM: ARCHITECTURE, NATIONALISM, AND THE "INVENTION OF TRADITION" in 19TH CENTURY EUROPE

Across 19th century Europe, architects attempted to create authentic national styles, governments tried to promote notions of national identity, and publics sought to make sense of it all. This seminar uses contemporary theoretical texts (Anderson, Habsbawm/Ranger), 19th-century primary sources, and recent works of scholarship to explore this process.

ARTH 467-012/667-010 ST. DENIS AND PROBLEMS IN 12th CENTURY ART

Detailed investigation of a small number of related topics. The focus will be the royal abbey of St. Denis, near Paris, and its Abbot Suger, other foci will be Reims, Rome, and Norman Sicily.

ARTH 605-010 STDS: VISUAL CULTURE IN POMPEII

Investigates the ways in which the inhabitants of ancient Pompeii exploited visual forms of communication, such as the art of spectacles and banquets, images of work and commercial spaces, graffiti, house decorations, civic benefactions, and commemorative monuments.

ARTH 621-010 STDS: THE FRENCH AVANT GARDE

Explores the impact of the dynamic relationship between capital and province, center and periphery, on the arts and culture of nineteenth century France. Linking politics, literature and the visual arts, its focal points will be artists such as Delacroix, Manet, Courbet and Cézanne.

ARTH 623-010 STDS: THEORY IN THE 1980'S

'Theory,' composed of ideas drawn from various disciplines, inspired new approaches in the 1980s not only to contemporary art, but also to art from ancient to modern. Students are encouraged to investigate how it revised understandings of art from diverse times and places.

ARTH 667-012 DECEPTION AND ILLUSION IN DUTCH AND AMERICAN PAINTING

Comparative study of trompe l'oeil painting styles as they developed in Holland in the 17th century and the United States in the 19th, seen in relation to particular social and cultural histories and to theories of realism. In conjunction with a major exhibition in Washington.

ARTH 667-013 OBJECT, IMAGE, VOICE

Explores the necessary relationships between narrative, and material and visual culture. Ideas that will be addressed include silence, appropriation, contestation, histories, and fictions. Case studies for discussion will be drawn primarily from the worlds of folk art, self taught art, and craft.

ARTH 667-011 THE PICTURESQUE IN AMERICA AND ENGLAND

Born in England and transplanted to the United States, the Picturesque applied the principles of Romanticism to material things. In the years 1770-1850 it transformed architecture, art, and landscape design, opening up dramatically new ways of seeing and encouraging innovative approaches that pointed to modernism.

BLACK AMERICAN STUDIES**BAMS 367-010 AMERICAN DIVERSITY**

Examines the multiethnic nature of American society. Special emphasis will be placed upon various challenges each group had in attempting to adjust to new social, cultural and political order. Explores contemporary issues surrounding changing demographics and diversity in schools, communities and the corporate world.

CHEMICAL ENGINEERING**CHEG 667-012 REACTION ENGINEERING OF ELECTRONIC MATERIALS**

Covers modern reactive processing methods of electronic materials in the semiconductor industry. Topics include reactor design, reaction chemistries, reaction mechanisms, materials characterization, and modern applications.

CHEMISTRY**CHEM 267-010 TWENTIETH-CENTURY****AFRICAN-AMERICAN CHEMISTS**

A survey of the lives and scientific careers of notable African-American chemists who lived during the twentieth century, with emphasis on their contributions to human understanding of chemical reactions.

CHEM 467-010 TUTORIAL METHODS OF INSTRUCTION

For juniors and seniors who are group tutor-facilitators in courses where problem-based learning (PBL) is used as the mode of instruction.

CHEM 527-010 INTRODUCTORY BIOCHEMISTRY

Emphasizes content more relevant for life sciences.

CHEM 527-011 INTRODUCTORY BIOCHEMISTRY

Emphasizes content more relevant for engineering and applied sciences.

CHEM 667-010 PROTEINS: STRUCTURE AND FUNCTIONS

Offers an overview of structural biology, including how X-ray crystallography, NMR spectroscopy and other techniques are used to solve structures of macromolecules. Representative classes of proteins will be discussed in terms of how a protein's structure relates to its function.

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

Consists of research experiences in each of three laboratories chosen to represent different research areas within Biochemistry, Molecular Biology, Bio-analytical Chemistry, Bio-organic Chemistry, Computational Chemistry, Biochemical Engineering, Bio-inorganic Chemistry, Protein Crystallography, 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. Prereq: CHEM 331/333, CHEM 332/334, or permission of instructor.

CHEM 820-010 TPCS: MODERN SURFACE CHEMISTRY

Provides an introduction and overview to the principles, methods, and analytical techniques of modern surface science. The material and subjects are appropriate for students from Chemistry and Biochemistry, Materials Science, Chemical Engineering, Physics, Mechanical Engineering, and for students with interests in bioengineering, biotechnology and nanotechnology.

CHEM 830-010 TPCS: PEPTIDE CHEMISTRY

Discusses the chemical preparation, purification and biophysical characterization of peptides, peptidomimetics and small proteins. Emphasizes in-depth analysis of protein secondary structure as well as hands on spectroscopic data analysis as it pertains to the design of structurally and/or functionally well-defined systems.

CIVIL AND ENVIRONMENTAL ENGINEERING

CIEG 167-010 INTRODUCTION TO ENVIRONMENTAL ENGINEERING II

A continuation of CIEG 135. Approaches and solutions to environmental problems, including lab exercises and field examples. Prereq: CIEG 135

CIEG 467/667-010 ADVANCED WATER QUALITY ENGINEERING

Review of classical dissolved oxygen models for streams and estuaries: analytical and numerical solutions, application to Delaware Estuary. Eutrophication models: Sediment flux models: Toxic chemical models.

CIEG 467/667-012 INDUSTRIAL ECOLOGY

Deals with interaction between industrial and ecological systems and its relationship to the control of environmental quality. Includes system analysis, material and energy flows and transformations, and sustainability development strategies. Presents major system tools such as waste minimization, pollution prevention, reuses and recycle of resources, green technology, design for environment, life cycle analysis, environment impact assessment, environmental management systems, environmental economics, and industrial park.

CIEG 467/667-014 TIMBER & MASONRY DESIGN

Introduction to timber design. Topics include wood as a structural engineering material, design of beams, columns, and nailed and bolted connections. Introduction to masonry design. Topics include masonry as a structural engineering material, flexural design, pilasters, and shear wall design.

CIEG 467/667-016 GROUNDWATER FLOW & CONTAMINANT TRANSPORT

Provides a general introduction to groundwater hydrology and contaminant transport in the subsurface. Topics include groundwater and subsurface materials, models for groundwater flow, physical and chemical processes affecting pollutant transport, multiphase flow in porous media, and analytical and numerical solutions to the groundwater flow and pollutant transport equations.

CIEG 667-013 AIR POLLUTION CONTROL

Introduces the origins, characteristics and environmental and health effects of priority air pollutants and the equipment commonly used to control emissions of these pollutants from stationary sources. Emphasis placed on understanding the principles, operation and design of different control devices. Prereq: CIEG 233, CIEG 305, and CHEG 231 or equivalent.

CIEG 667-017 SENSORS IN CIVIL ENGINEERING

Presents a comprehensive survey of sensors and their potential use in civil infrastructure testing and monitoring. The course will introduce students to, Fiber Optic Sensors and MEMS (Microelectromechanical Systems). Emphasis on understanding the potential applications and limitation of various sensors in Civil Infrastructure application.

CIEG 867-010 PHYSIOCHEMICAL TREATMENT PROCESSES IN ENVIRONMENTAL ENGINEERING

Application of physical, chemical, and engineering techniques to water treatment and pollution control processes. Separation processes used in water treatment and in residuals management: coagulation, sedimentation, filtration, disinfection, adsorption and demineralization processes. Sludge and residuals treatment including thickening, dewatering, and thermal processes.

COMPUTER AND INFORMATION SCIENCES

CISC 167-010 INTRODUCTION TO COMPUTER SCIENCE WITH WEB APPLICATIONS

Principles of computer science illustrated through programming in scripting languages such as JavaScript and VBScript. Topics include control structures, arrays, functions, and procedures. Programming projects illustrate web-based applications.

CISC 459-010 TPCS: NETWORK AND SYSTEM SECURITY

Provides in depth looks at concepts that are essential in maintaining a secure network of computers connected to the Internet. Major topics covered will be trust management, risk analysis, minimizing security risks, common exploits and how to prevent them, firewalls, and cryptography. Prereq: CISC 361.

CISC 479-010 TPCS: WEB SEVER TECHNOLOGIES

Studies the programming and architecture of web servers and the technologies for implementing high performance, sophisticated web sites for applications like e-commerce. Students learn how to install and set-up a web server and database, how to write and deploy programs for a web server, and how to design and implement multi-tier client/server applications with database backends. Prereq: CISC 220, CISC 370. Recommended: CISC 437

CISC 489/689-010 TPCS: COMPUTER VISION

An introduction to the analysis of images and video in order to recognize, reconstruct, model, and otherwise infer static and dynamic properties of objects in the three-dimensional world. Studies the geometry of image formation; basic concepts in image processing such as smoothing, edge and feature detection, color, and texture; segmentation; shape representation including deformable templates; stereo vision; motion estimation and tracking; techniques for 3-D reconstruction; and probabilistic approaches to recognition and classification.

CISC 849-010 TPCS: ANALYSIS AND VISUALIZATION OF DEFORMABLE BODIES

Handles advanced material in the areas spanning computer vision, graphics & visualization and image processing. Looks at methodologies for modeling, analysis and visualization of deformable bodies. Consists of mathematical elements in the areas of differential geometry, finite elements, super/hyperquadrics and spherical harmonics. Implements various techniques, making them available to the research community.

CISC 879-010 TPCS: PARALLEL COMPUTATION

Study of algorithms and tools for high performance computation using many processors and memories. Problem-driven study of techniques for parallel computation. Includes concurrency, program decomposition, data distribution, communication, load balancing, scalability, locality, granularity, debugging, and performance evaluation.

CISC 889-010 TPCS: STATISTICAL APPROACHES TO NATURAL LANGUAGE PROCESSING

With the availability of large amounts of text in electronic form, an emerging trend in natural language processing is to obtain useful quantitative information from such text corpora. Course covers various statistical techniques currently being used in solving important NLP tasks.

CISC 889-011 TPCS: BIOINFORMATICS

Protein homology detection, protein family classification, sequence signature (such as motifs and membrane domains) identification, phylogenetic analysis, secondary and tertiary structures. The latest developments include: gene expression, genetic networks, metabolic pathway networks, and proteomics. Major methods and techniques include:

dynamic programming, sequence alignment, hidden Markov models, support vector machines, Stochastic grammars, and bayesian networks.

CONSUMER STUDIES

CNST 267-010 E-AGE CONSUMER

A non-technical examination of evolving trends in technology and how consumers will use that technology in markets and demand that markets serve them with new technology. Investigates the impact of consumers who are accustomed to new technology on business, government and social institutions.

CNST 467-010 VALUES AND ETHICS IN LEADERSHIP

Focus on the question of "towards what ends do leaders serve?" And explores the responsibilities of leadership in the broad social context. Ethical and moral issues will be explored as they relate to the stakeholders of the organization and different perspectives will be discussed.

COMMUNICATIONS

COMM 200-010 TPCS: COMMUNICATION AND FAMILY SYSTEMS

General introduction to the role of communication within families across the life course. Topics include communication issues regarding parent/ child communication, teens, sibling relationships, adult/children & elderly parents, and marriage.

COMM 318-010 TPCS: BROADCAST NEWSWRITING

Writing for broadcast news, including news judgment, news gathering, writing and editing. Some discussion of legal and ethical issues.

COMM 342-449 TPCS: ORGANIZATIONAL CULTURE, WHAT IT IS AND HOW IT WORKS

Introduces students to various types of organizational cultures. Emphasis on how organizational cultures begin, how they influence the day-to-day work activities; and, how the student can look beyond the obvious in trying to understand an organization's culture.

COMM 418-010 TPCS: IMPACTS OF COMPUTER TECHNOLOGY

Surveys the social and psychological effects of new computer technologies. Examines effects at various levels with an emphasis on the individual and interpersonal levels. The goal is to provide students with a better understanding of the impact of computer technologies in light of communication and psychological theories.

COMM 440-010 ADV TPCS: RESEARCH PRACTICUM: RESOURCE DILEMMAS

Resource dilemmas are situations in which groups of people must manage a shared resource, such as a stream of fresh water or an electricity supply. In this course, we will conduct an experimental study of communication within groups facing a resource dilemma.

EARLY AMERICAN CULTURE

EAMC 667-011 DECORATIVE ARTS AND DESIGN, 1860 TO THE PRESENT

A survey of major topics in decorative arts including: Aesthetic Reform, Colonial Revival, Arts and Crafts, Art Nouveau, Art Deco, Modernism, and Contemporary Craft. Products of industrial design and work of studio artists will be considered. Trips to major collections in the Mid-Atlantic region.

EAMC 667-016/UAPP667-010 AMERICAN INTERIORS 1820-1940

Includes the architectural revivals of the nineteenth century, the advent of the Aesthetic Movement and Arts and Crafts era, and popular housing for the middle class during the early 20th century. Special attention will be paid to Wilmington residences built between 1880 and 1930.

ECONOMICS

ECON 367-010 URBAN ECONOMICS

Uses simple microeconomic analysis to explain why cities exist, where they develop, how they grow, and how different activities are arranged within cities. It explores the economics of urban problems and policies related to local governments, land rent and land use patterns, poverty, housing, transportation, education, and crime. Prereq: ECON

ECON 367-050 THE ECONOMY OF FAMILY BUSINESS

To enable 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.

ECON 367-051 ENVIRONMENTAL ECONOMICS

Concerned with the impact of the economy on the environment, the significance of the environment to the economy, and the appropriate way of regulating economic activity so that balance is achieved among environmental, economic, and other social goals. Topics include introductory welfare economics, the impact of free markets on the environment, and environmental regulation. Prereq: ECON151.

ECON 467-010 CONTEMPORARY MACROECONOMIC POLICY

Analyzes macroeconomic policy problems as they unfold during the semester. Since the Federal Reserve is the main policymaker in the U.S. the course follows closely Fed announcements and policy decisions. How Fed decision affect the economy, the business community and more specifically the financial markets is analyzed. Prereq: ECON 303.

ELECTRICAL ENGINEERING

ELEG 467/667-010 ANTENNA THEORY AND DESIGN

Studies the radiation characteristics of antennas, numerical and analytic antenna analysis methods, and design techniques for many types of antenna. Includes wire antennas, antenna arrays, broadband antennas and micro strip antennas.

ELEG 467/667-011 OPTICAL DEVICE ENGINEERING

Introduction to advanced optical and opto-electronic devices that are used, or are being developed for use, in modern information processing systems. The technology covered includes optical fibers diffractive optical elements, photonic bandgap devices, and a variety of active sources, detectors and modulators.

ELEG 467/667-012 BIOMEDICAL TECHNOLOGY

Explores the world of biomedical applications of technology emphasizing micro and nano-fabrication techniques. Some of the specific topics include nanostructure synthesis, applications of nanotechnology in medicine, nanofluidics, nanodrug delivery systems, nanoelectronic-biology interface, and nanoscale tissue engineering.

ELEG 667-024/UAPP 667-024 SOLAR ELECTRIC SYSTEMS

Basics of solar cell and wind technology, applications, and systems. Critical issues in research and manufacturing. Off-grid, grid-connected and centralized power system design. Influence of economics and policy. Emphasis 80% on solar, 20% on wind.

ELEG 667-014 PHOTOVOLTAIC DEVICES AND SYSTEMS

Photovoltaic device design and modeling are covered in detail. Material will focus on silicon-based devices and real world manufacturing issues. The course will also include a survey of present day manufacturing techniques, commercially available products, worldwide markets and solar system performance issues.

ELEG 867-010 RF AND MICROWAVE TECHNOLOGY

Modern telecommunications and datacom systems operate at frequencies in the radio frequency (RF) and microwave range. Explains the basic concepts and technologies required to design RF and microwave devices, circuits, and systems. Discusses examples of applications to wireless and lightwave systems.

ENGLISH

ENGL 267-410 INTERMEDIATE STORYTELLING

Teaches public speaking through storytelling and focuses on story selection, preparation and presentation techniques. Provides practical information on finding performance sites and details about the business side of storytelling. Experienced tellers focus on "becoming a character" and developing theme-oriented programs. For beginners, it adapts to individual needs and interests.

ENGL 318-010 STDS: THE HOLLYWOOD MUSICAL

Through readings in film history and theory, investigates the Musical genre, paying particular attention to gender and sexuality both as depicted in the films and as they affect audiences. Studies genre theories, function, labels and popularity.

ENGL 356-010 STDS: CONTEMPORARY HISTORICAL FICTION

Examine and discuss selected works of contemporary fiction focusing on specific historical events and the nature of History as a concept. Examine and Critique our present moment in time. Problematize simple distinctions between “the contemporary” vs. “the historical” and “the fictional” vs. “the real”.

ENGL 356-011 STDS: MODERN POETRY

Survey of possible things “poetry” has managed to be in the twentieth century. First, covers “canonical” poets of the first half of the century. Second, confronts the disappearance of the ideology of “canon” by readings of more recent poets to be selected by students.

ENGL 371-010 STDS: CONTEMPORARY NOVELS & STRANGE BEDFELLOWS

Explores the ways that contemporary novelists develop, revise, and subvert inherited themes and traditions.

ENGL 413-010 TPCS: DESIGNING ONLINE INFORMATION

Focuses on the design of information displayed on the computer screen, specifically websites, but also online tutorials and software help files. Covers both the theory of information design and its practical application. Includes user and task analysis, interface design, information architecture, and usability. Use Dreamweaver, ImageReady, and HTML.

ENGL 467-080 SCREENWRITING

Intensive practical introduction to the craft of screenwriting. Beginning with concepts, treatments, and sample scenes, students write, pitch and rewrite preliminary studies for a screenplay. Discussions will be devoted to plot construction, dialogue, characterization, and the market. Next, working independently or as part of a group, students complete a feature-length screenplay.

ENGL 480-010 READING IN AMERICA, 1800-2000

Explores the historical and aesthetic function of “reading” in relation to American Literature. Examines how material, cognitive, and pedagogic role of literacy developed and changed in American culture; what it means to cipher, memorize words, view pictures, or translate voices into concepts of Self and Other.

ENGL 480-012 SEM: JANE AUSTEN

All of Jane Austen’s published fiction, as well as a selection of her letters and a sampling of the criticism about her work will be read and discussed.

ENGL 480-013 SEM: QUEEN ELIZABETH

Explores Queen Elizabeth I’s life as a cultural icon. Through an eclectic group of texts, considers the image and the idea of Queen Elizabeth. Also, considers Elizabeth’s representation in recent dramatic performances. Explores questions of biography, the cultural uses of history, the role of camp, and the visual dynamics of representation.

ENGL 480-014,084/WOMS 480-014 SEM: THE BRONTËS: FICTION AND FILM

Devoted to fictional works by the Brontes family and to cinematic representations of the sisters and their work. Students become acquainted with the Bronte novels, biography and criticism of the Brontes, Victorian contexts, and the art of cinematic adaptation.

ENGL 480-015 SEM: TRICKSTER FIGURE IN LITERATURE

Read and discuss a wide variety of literature that features the trickster, and delve into the meaning and uses of these slippery characters: American Indian folktales, Norse mythology, medieval beast fables, and even Twain.

ENGL 481-010 SEM: TEACHING ENGLISH

Focuses on practical issues that affect teaching as a profession, job searching, and the preparation of Performance Portfolios demonstrating the student’s mastery of the required program standards.

GEOLOGY**GEOL 467-010 SENIOR SEMINAR**

Capstone course offered around a "general geology topic of interest" selected by the instructor(s). Emphasizes presentation, writing skills, and review/understanding of published literature.

HEBREW

HEBR 267-010 ADVANCED INTERMEDIATE HEBREW

Aimed at helping the intermediate level student strengthen his/her speaking, listening, reading and writing abilities. Concentrates on topics such as the following: The Revival of Hebrew; In the apartment/house; My future home; The weather and the seasons; and Future tense. Prereq: HEBR 107 or equivalent.

HEALTH AND EXERCISE SCIENCES

HESC 667-010 HUMAN CARDIOVASCULAR CONTROL

Analysis of human cardiovascular control as it pertains to orthostasis, exercise and heat stress. Emphasizes the role of mechanical, neural and humoral factors. Stresses factors that control oxygen transfer from lungs to cells.

HISTORY

HIST 268-010 SEM: HISTORY AND MEMORY

Looks at how popular understandings of the American past have been embodied in and shaped by public monuments, textbooks, political speeches, radio programs, films, museums, and political controversies. Introduces students to historical methods and issues involved in historical interpretation. Covers basic historical research.

HIST 268-011 SEM: SEXUALITY AND FAMILY LIFE IN EUROPE

Explores the history of sexuality and family life in Europe through an exploration of primary sources and historical methods. Topics include Church and state views of sexuality, the social history of marriage, birth, and child rearing, love and sentiment in the domestic sphere, and the changing social and political meanings of sex and the body.

HIST 268-012 SEM: MODERN AMERICAN BUSINESS

HISTORY

Explores how business affects so much of our world. Answers questions about the history of modern American business in the 19th and 20th centuries, including worldwide corporate reports, stock market existence and its role over time, and how the flow of international investments shaped American history.

HIST 268-013 SEM: ANONYMOUS AMERICANS

Introduction to the literature and research methods of social history. Students read and discuss books and articles that use social history research methods such as oral history, quantitative analysis, and reformers' reports to "write history from the bottom up."

HIST 268-014 SEM: TERRORISM IN NORTHERN

IRELAND

Prepares history majors in the skills and methods for doing historical research. Analytical writing forms the core of the course. Understanding how historians evaluate evidence and develop explanations is fundamental to all further study. Explores violence, party structures, sectarianism, ideology, gender, foreign policy, the media, and the impact of single individuals on public events.

HIST 268-015 SEM: AMERICAN INDIANS IN THE 20TH CENTURY.

Focus on issues of ethnicity, self-determination and cultural revitalization of American Indian communities in the 20th century. Examines the Indian New Deal, postwar ethnicity and urban issues, and support for self-determination in the late 20th century.

HIST 367-010 ANCIENT JEWISH HISTORY

Introduces students to the history of the Jewish people from the Persian conquest in the seventh century BCE to the Arab conquest in the seventh century CE. Emphasizes historiography. Explores Jewish variety, sovereignty, governance, economics, culture, dispersion, gender, identity, religion, conflict, sectarianism, acculturation, and assimilation.

HIST 367-011 EUROPEAN WOMEN'S HISTORY, 1789-PRESENT

Examines women's lives in Europe from the French Revolution to the late twentieth century. Through analysis of social, economic, political, religious, and cultural developments, explores women's roles and the importance of gender in modern Europe. Covers women's political action, gender and industrialization, women's writing, suffrage and feminism, sexuality and the state, and family life.

HIST 367-012 MODERN MEXICO

Emphasizes the relationship between social change, economic developments, and political organization from Independence to the present. Understands the long-term transition from militarism, social inequality, and dictatorship to recent efforts to forge democracy, social equity, and just relations with the U.S.

HIST 367-013 ENGLAND'S RISE TO GREATNESS, 1688-1789

Synthesizes the social, economic, political, cultural and colonial developments during England's rise to world power from 1689-1789. Covers the rise of the novel, voyages of Captain Cook, origins of empire, growth of industry, Celtic fringe, novelty of popular politics, fascination with landscape, birth of class, and changing status of women.

HIST 367-014 THE PACIFIC WAR, 1931-1945

Examines the Pacific War from 1931, when Japan invaded Manchuria to 1945, when the United States dropped atomic bombs on Hiroshima and Nagasaki.

HIST 367-015 AMERICAN SPORTS HISTORY

Traces major developments in American sports since the Civil War. Discusses the professionalization of sports and the transformation from amateur game to big business, industrial sport, race and the evolving position of African American athletes, mass media's effect on sports, the shifting role of women in sports, and the "Golden Age" of sports in the 1920's, and the creation of athletic celebrities.

HIST 367-440 DETECTIVES, CRIME AND NOVEL IN 19TH CENTURY ENGLAND

Examines the interrelationships between the development of urban industrial society, the establishment of a modern police force, and the creation of the detective story genre.

HIST 367-441 20TH CENTURY LATIN AMERICAN REVOLUTIONS

Examines revolutionary change, attempted revolutionary change, and the obstacles to such change in five Latin American nations: Mexico, Guatemala, Nicaragua, Chile, and Cuba. Discusses both external and internal processes within the context of each of the five country's historical development.

HIST 411-010 SEM: POLITICAL ECONOMY OF MODERN US

Introduces the American debates over class, authority, and democratic possibility, particularly as these have developed since the advent of corporate capitalism. Covers the "managerial revolution"; the idea and significance of the middle class; the terrors of rural dispossession; self-consciousness and the varieties of cultural modernity; the politics of professionalism; and the American empire within world history.

HIST 467-010 SEM: THE ATOMIC BOMB

Examines various types of records of the atomic attacks on Hiroshima and Nagasaki with the aim to furnish us with an intelligent, articulate, and informed historical understanding of the making, use, and postwar consequences of the atomic bomb. Contemplate the bomb's meaning and impact on our everyday lives.

HIST 611-011 SEM: AMERICAN LABOR HISTORY

Acquaints students with the current state of knowledge and theory with regard to American working class history. Concerned with the relationship of class to race, gender and ethnicity, the role played by labor organizations reshaping working class opportunities and attitudes, and the influence of the "state" on the character of working class consciousness and opportunity in America.

HIST 675-010 SEM: NATIONAL IDENTITY AND NATIONAL MEMORY

Focus on the construction and development of national identities in Europe and elsewhere. Takes an interdisciplinary approach, drawing not only on recent historiography but also on relevant works of anthropology, political science, and literary criticism.

HIST 683-010 STDS: AMERICAN SLAVERY IN COMPARATIVE PERSPECTIVE

Introduces students to some of the extensive historical literature on slavery. Considers the evolving interpretations of American slavery in the context of New World slavery and forced labor in general. Concerned with the historiography of American slavery, the place of unfree labor in the modern western world, and the methodology of comparative analysis.

LEGAL STUDIES

LEST 401-010 SEM: PHILOSOPHICAL APPROACHES TO LAW

Explores the various philosophical approaches to studying law. Includes: What is law; How is law related to justice; and What is a legal system?

LIBERAL STUDIES

MALS 667-010 DRAMA IN PERFORMANCE

Focus on five campus productions staged by the Professional Theatre Training Program. Includes play trips to Wilmington and Philadelphia. Works include Shakespearean comedy to modern Irish tragedy. Features visits by actors, directors and playwrights.

MALS 667-011 ARCHITECTURE OF DELAWARE AND THE MID-ATLANTIC

Traces the development of architecture from the seventeenth century to the present in Delaware, with frequent reference to Baltimore and Philadelphia as corollaries and major sources of trends and designs. Considers all periods of architecture, starting with the earliest Dutch buildings.

MALS 667-410 ATOMIC BOMB: EXPERIENCE, HISTORY, AND MEMORY

Focus on various records of the atomic bombings of Hiroshima and Nagasaki. Strives to furnish students with an informed historical understanding of the making, use and postwar consequences of the atomic bomb as a basis to contemplate it's meaning in our lives today.

MALS 667-430 AMERICAN WOMEN POETS: THE SEARCH FOR SELF

Focus on American women poets from Anne Bradstreet to the present, exploring the unique ways that each of these poets use form as a means of artistic expression and as a means to self-discovery.

MATH

MATH 167-010 QUANTITATIVE REASONING

Modern world applications of mathematics. Quantitative reasoning used in everyday life. How mathematics is used in a variety of topics and issues. Combines critical thinking skills with basic mathematics in contexts encountered in various disciplines such as social sciences, business and economics.

MATH 367-010 CURVES/SURFACES INGEOMETRIC MODELING

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

MATH 567-010 FOUNDATIONS OF MATHEMATICS II

Intended as the second experience in several areas of the undergraduate curriculum: Geometry, Discrete Mathematics, and Probability. A goal of the course is to integrate the topics, rather than to specialize. Also, to discuss projections of the material on high school mathematics. Prereq: an undergraduate degree in Mathematics or permission of instructor.

MECHANICAL ENGINEERING

MEEG 467-010 AUTOMOTIVE POWER TRAIN THEORY

Analysis & design of automotive powertrain design with emphasis on competition & efficiency optimization. Internal combustion engine thermodynamics, port and chamber design, cam timing, and exhaust systems. Historical perspective on development through modern engines, ignition, carburetion, fuel injection and integrated engine management systems, turbocharging, supercharging. Prereq: PHYS 310 or permission of instructor.

MEEG 467-011 MATERIALS AND TECHNOLOGY

Prerequisite: MEEG 321 or equivalent.

MEEG 467-012 MODELING AND ANALYSIS OF SELECTED BIOLOGICAL SYSTEMS

Differential equation models of various biological systems, such as from ecology, the firing of the neuron, and heartbeat, with emphasis on nonlinearity and phase plane analysis. Prereq: MATH 351.

MEEG 467-013 SPECIAL TOPICS IN ENGINEERING DESIGN AND DEVELOPMENT

Continuation of MEEG 401. Course offers students the opportunity to continue to work on senior design projects with their sponsors. Permission of instructor required.

MEEG 467/667-014 LUBRICATION AND BEARING DESIGN

Friction, wear, effect of lubrication, bearing selection. The Reynolds pressure equation. Externally pressurized bearings. Journal and thrust bearings. Dynamic properties of lubricant films, pivoted pad bearings. Elastohydrodynamic

theory, lubrication regimes, numerical formulation of the EHL problem. Rolling contact bearings, minimum film thickness calculations. Turbulence and thermal effects. Gas lubrication, correction for ultra thin films, gas bearings.

MEEG 667-010 MECHANICAL BEHAVIOR OF MATERIALS AND STRUCTURES

Introduction to important topics in mechanics and failure theories of solids. Topics include plasticity; thermal stresses; fracture and damage mechanics; and buckling. Discusses classical theories in light of the current state-of-the-art. Problem solving will be based on both analytical methods and computational mechanics. Prereq: MEEG 610 or permission of instructor.

MEEG 667-015/CIEG 667-015 MECHANICAL BEHAVIOR OF MATERIALS & STRUCTURES

Introduction to important topics in mechanics and failure theories of solids. Topics include plasticity; thermal stresses; fracture and damage mechanics; and buckling. Discusses classical theories in light of current state-of-the-art. Problem solving is based on both analytical methods and computational mechanics.

MUSIC EDUCATION

MUED 267-010 AESTHETIC EDUCATION

Discover the philosophical basis of the performing and visual arts in education, and strategies for their integration into core curriculum subjects. Experience multiple learning/teaching styles and a realization of new possibilities in communication.

MUSIC

MUSC 167-010 PEP BAND

Attends all home basketball games performing a variety of pop, rock and jazz selections. Performs at select games during Winter Session. Attendance at these games is mandatory.

MUSC 167-011 MARCHING PERCUSSION TECHNIQUES

Focuses on advancing skills on the marching snare drum, multi-tenors, bass drum, cymbals or front ensemble. Emphasizes techniques through an opportunity to learn basic arranging skills. Open to students of all performing levels.

MUSC 167-013 HANDBELL ENSEMBLE

Students experience the art of ringing handbells and choir chimes, perform 3-5 octave handbell literature and conduct the ensemble. Open to music and non-music majors. Ringing experience not required. Prereq: ability to read music.

NUTRITION AND DIETETICS

NTDT 467-010 NUTRITION/FITNESS PRACTICUM

Provides the opportunity for selected students to participate in integrating nutrition into a fitness environment to bring about healthier life styles. Designed to provide experiences in all phases of a professionally staffed, family oriented fitness center.

PHILOSOPHY

PHIL 367-010 TPCS: PHILOSOPHY OF LAW

Covers three topics in the Philosophy of Law, one from each of the main areas of law: criminal, civil and constitutional.

PHIL 367-011 TPCS: BUSINESS AND RESPONSIBILITY

Investigates various kinds of responsibility as they relate to corporations. Are corporations morally responsible for what they do? If so, what are they responsible for doing? Who are they responsible to? Are employees responsible for what their corporation does?

PHIL 367-440 RELIGION AND PSYCHOLOGY

Through reading the works of Western thinkers such as James, Freud, Jung, and others, and Asian traditions such as Daoism and Buddhism, we will try to locate the interface between religion, philosophy, and psychology, in a cross-cultural perspective.

PHIL 465-010 SR.SEM: THE LANGUAGE OF THOUGHT

In what language (symbol system) do we think? Philosophers and cognitive scientists have proposed that there is an innate language of thought in which we think and with which we learn our first natural language. This course will examine the basis for such a language of thought.

PSYCHOLOGY

PSYC 367-010 INTRODUCTION TO NEUROSCIENCE

An interdisciplinary approach to the study of the nervous system. Course includes descriptions of gross anatomy and neurophysiology, and the study of sensory and motor systems, emotions, motivation, memory, sleep and clinical syndromes. Prereq: PSYC 201, BISC 208, 2 semesters of Chemistry.

PSYC 367-011 INTRODUCTION TO NEUROSCIENCE LABORATORY

Exercises include a dissection of a sheep brain, implantation of an electrode into a 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 467-010,081 IDEAS IN BIOPSYCHOLOGY

Read six books during the semester. The readings will consist of "classics" in psychology, biology, and philosophy. One student will be responsible for leading the discussion about that book. The reading list is flexible and will be chosen depending on the interests of the students.

PSYC 467-013 BIOPSYCHOLOGY OF ANXIETY/DEPRESSION

Biopsychology offers a rich tradition that integrates behavior and biology to offer future theoretical and research directions for studying these disorders. Explores neuroanatomy, pharmacology and behavior of anxiety and depression gleaned from experimental studies in both animals and humans. Emphasizes animal models of anxiety and depression, and their relevance to the human condition.

PSYC 467-082 HNRS: 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.

SOCIOLOGY

SOCI 267-010,011 RESEARCH ON ALCOHOL

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

SOCI 367-010,080 SOCIAL INEQUALITY AND FILM

Read materials to develop an intersectional analysis of social inequality based on race, social class, gender, and sexuality. Explore the role of films in creating images of ourselves, others, and social processes, like social mobility. View major motion pictures and documentary films to develop a critical perspective for viewing the media and its role in promoting ideas and knowledge.

SOCI 467-010 POST WORLD WAR II LATIN AMERICAN IMMIGRATION

Review of the history and social science of Mexican, Puerto Rican, Cuban, Dominican, and Central American immigration to the United States. Covers the different histories of these immigration flows and their change over time, the immigrants' various places of destination and experiences of incorporation into US society and culture, and the persistent problems of these minority communities.

SOCI 467-011 SEX, POWER AND POLITICS

Focus on the moral, legal, economic, political, and cultural arguments that currently condition the organization of sexuality in post-World War II American culture. Considering feminist, social constructionist, postmodern, and sociological perspectives, further evaluates the current issues surrounding sexual and gender identity and sexual behavior and desire.

SOCI 467-012 SOCIAL ASPECTS OF RISK

Focus 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 are also covered.

WOMENS STUDIES

WOMS 205-010 WOMEN IN THE ARTS AND HUMANITIES

Cross-cultural examination of two related topics: feminist theories of how best to educate girls, and the experiences, past and present, of diverse women around the world as students and as educators. Includes essays about higher education for Japanese women in the early 1900s, to memoirs of life at women's colleges during WWI in England, recent journalistic reports of conflict over educating women in Afghanistan, current debates in the U. S. over single sex vs. coed classrooms, and accounts of the global rise of Women's Studies as an academic subject.