

Supplemental Course Descriptions

Fall, 2010

Updated July 20, 2010

ANIMAL & FOOD SCIENCE

ANFS 420-010 EQUINE MANAGEMENT

Application of scientific principles of nutrition, health care, behavior, reproduction, and farm management to the discipline of horse management. Laboratory provides hands-on experience. Intended for students interested in the horse industry.

ANTHROPOLOGY

ANTH 367-010 THE CULTURE OF COLONIALISM

Includes Colonialism and the cultural and social consequences for those who were colonized. Explores the literature of African and Indian authors and the historical anthropological scholars who describe the everyday experience of colonialism in the lives of ordinary people.

ANTH 367-011/BAMS 367-011 ANTHROPOLOGY OF THE AFRICAN DIASPORA

Discusses the historical, geographical, and cultural specificities of the African Diaspora. Addresses the history and geography of the Diaspora; slavery and responses to slavery; the big thinkers, cultural manifestations (music and religion); discourses of whiteness, and ways to remember the Motherland.

ANTH 367-012 MEDICAL ANTHROPOLOGY

Studies the complex interactions of human biology (evolution, variation, and adaptation), and human culture (beliefs and practices about disease and health care) that result in specific patterns of health, illness and disease.

ART

ART 367-010 CONTEMPORARY GALLERY PRACTICES

Students learn how to run and maintain UD@Crane, participate in the installation of art works, marketing design, public relations, office organization, discussions of art work with the public, help with receptions, events, research around exhibitions, artists.

ART CONSERVATION

ARTC 667-010/MSST 667-010 BUILDINGS, SUSTAINABILITY & COLLECTIONS ENVIRONMENTS

Considers sustainable management of museums and archives for preventive conservation. Addresses exterior climate, passive and active climate-moderating effects and envelopes for mitigation of collections risks and sustainable strategies.

ART HISTORY

ARTH 198-010 BUILDING THE WESTERN WORLD

Surveys patterns of architecture and settlement from antiquity to last Friday through themes that make the past relevant to today;. Egyptian pyramids are discussed in relation to beliefs regarding death, while skyscrapers and business districts

ARTH 199-010 THE AGE OF MICELANGELO

Explores the art and life of one of the greatest artists of all times: Michelangelo Buonarroti. Examines masterpieces such as David and the Sistine Chapel ceiling paintings, but also the works of predecessors, contemporaries and followers.

ARTH 267-010 TIMBUCTOO, THE MYSTERIOUS: ISLAMIC ARCHITECTURE FROM CAIRO TO TAMBOKUTU

Surveys architectural dialogues in and across the Magreb and the Sahel in the 9th through the 20th centuries. Includes basic introduction to philosophical texts and to Muslim travelers memoires in relation to buildings as congregations of space.

ARTH 405-010 ART IN THE LIVES OF EVERYDAY ROMANS

Explores the ways in which art and architecture functioned for ancient Romans living in Pompeii, Herculaneum, and Ostia Antica. Investigates houses, tombs, temples, and buildings for civic administration, business, and recreation.

ARTH 456-010 CROSS-CULTURAL DIALOGUES, TRANSNATIONAL PRACTICES

Studying the latest designs by architects who practice beyond their cultural familiarity. Learning about theories of transnationalism and issues in cross-cultural aesthetics, while examining Gehry's Guggenheim in Bilbao, Koolhaas's CCTV in Beijing.

ARTH 616-010 CARAVAGGIO'S FOLLOWERS

The International Caravaggesque movement in all its variety and complexity, from Manfredi and Artemisia Gentileschi in Rome, Ribera in Naples, and Spada in Bologna, to Honthorst in Utrecht and Georges de la Tour in Lorraine. Focus on attribution and iconography; narrative structure; concepts of naturalism.

ARTH 620-10 PORTRAITURE AND ARCH. OF THE 17TH/18TH CENTURY EDO

Explores the aristocratic portraiture of Edo, specifically of and within the ancient cities of Benin, Nigeria. Considers how like or unlike portrait making and its political milieu elsewhere, was this African parallel in the era of early globalization.

ARTH 629-010 MONUMENTS, MEMORY, & MATERIAL CULTURE

Examines the social life of the material environment by looking at objects and constructions meant to mark or, in some cases, induce memory.

ARTH 635-010 SEMINAR IN AMERICAN ART: REVOLUTIONARY VISUALITIES

Interdisciplinary seminar immerses students in the art and literature of the American Revolutionary period, exploring late-18th century images and objects within the critical contexts of race, national identity, political culture, public spectacle, and globalism. Two museum field trips, three guest lecturers & workshops by visiting scholars. Coreq: ENGL 844.

BIORESOURCE ENGINEERING

BREG 667-010 WATERSHED HYDROCHEMISTRY

The role of hydrology in the exports of solutes and chemicals from watersheds. Linkages and feedbacks between hydrologic and biogeochemical processes. Emphasizes mechanistic conceptual models for solute transport.

BUSINESS ADMINISTRATION

BUAD 367-050 CAREER EXPLORATION AND PLANNING

Learn how to use career information resources and acquire job search skills through class discussions, skill development tasks, weekly journals, and written assignments. Gain exposure to different career paths.

BUAD 429-051/667-051 SELECTED TOPICS IN MANAGEMENT

Topical seminar on such management issues as organizational socialization, work motivation, and organization-environment relations. Stresses development of an individual research project.

CHEMISTRY

CHEM 667-010 COLLOID CHEMISTRY

Principles of colloid chemistry and its applications; surface/interfacial tension, capillarity, adsorption/adsorption isotherms, adhesion, contact angles, surface wetting, emulsification, foaming, interfacial thermodynamics/electrostatics.

CHEM 667 011 INTRODUCTION TO INDUSTRIAL CHEMISTRY

The chemistry of converting petroleum, natural gas and renewable resources to the myriad consumer items that we take for granted. Includes organic/inorganic chemicals, catalysts, reaction mechanisms, polymers, and structure-activity relationships.

CIVIL & ENVIRONMENTAL ENGINEERING

CIEG 467-011/CIEG 667-011 TRAFFIC ENGINEERING & MODELING

Introduction to the theoretical and practical aspects of traffic engineering including the theory and practice of the most commonly used computer software tools. Includes the Highway Capacity software applications and the Signal Optimization software packages.

CIEG 667-012 MANAGING ENGINEERING PROJECTS

Gain an understanding of the principles of planning, controlling, and evaluating engineering projects. Learn the use of tools and techniques and practice their use on a personal project. Topics include project organization, budgeting, and scheduling.

CIEG 667-013 ADVANCED DATA ANALYSIS

Comprehensive introduction to the principles and practices of emerging advanced data with particular focus to engineering science. Provides insight to emerging advanced statistical techniques.

CIEG 667-014 PHYSICS OF COHESIVE SEDIMENT

Mechanics of cohesive sediment transport processes in estuarine and coastal environments; overview of fine sediment processes; cohesive sediment properties; flocculation processes; mixture theory and mud-laden boundary layer; settling, suspension and turbulence-sediment interactions; rheological effects; consolidation and erodibility; fluid mud processes and its Applications; chemical-biological, gas effects.

CIEG 867-010 SEMINARS ON SELECTED OPERATIONS RESEARCH TECHNIQUES & MODELING

Aimed at teaching Ph.D. students popular operations research techniques such as integer programming, game theory, data envelopment analysis (DEA), analytical hierarchical process (AHP), Hilbert-Huang Transformation (HHT), etc.

COMPUTER SCIENCE

CISC 367-010 SECURE SOFTWARE DESIGN

Learn to write robust, secure code that is specifically designed to function securely and correctly during concentrated robust attacks. Look at ways applications are exploited, countermeasures used and how to access the security of an application. Coreq: CISC 360. Prereq: CISC 220

CISC 367-011,012 SERVICE LEARNING: XO LAPTOP PART 1 & PART 2

Program XO laptops with Python to create learning software for different ages and subjects, consult with middle school teachers, participate in open-ended team projects, assist teachers in integrating XOs in the classroom, hone communication skills.

CISC 367-013 PROGRAMMING PRACTICUM: RAPID PROTOTYPING

Programming projects typically need teams of programmers to rapidly develop proof of concept working implementations. Using ACM international programming contest problems as examples, we hone skills of the programmer's craft.

CISC 849-010 ADVANCED TOPICS IN VISION & GRAPHICS: DEFORMABLE BODIES

Course covers advanced topics in computer vision & graphics, including reconstruction, motion analysis, tracking animation of deformable bodies and models of graphics and vision. Involves lectures, paper presentations and a group project.

CISC 849-011 ADVANCED TOPICS IN COMPUTER APPLICATIONS: COMPUTATIONAL BIOMEDICINE

Seminar exploring machine learning methods and their current applications in biology and medicine.

CISC 859-010 ADVANCED PROGRAM ANALYSIS

The ability to analyze software is fundamental to creating quality applications. A seminar/discussion format guides students through an investigation of common analysis techniques and how they are used to build, validate and maintain software.

CISC 879-010 SYMBOLIC EXECUTION

Program analysis technique in which symbolic expressions are used to represent values of variables. Includes applications in program testing and verification. Surveys literature and explores some of the new tools.

CISC 879-011 ADVANCED TOPICS IN DISTRIBUTED SYSTEMS

Covers fundamental concepts and recent developments in distributed systems. Topics include traditional system models and algorithms as well as research topics in grid computing to advanced network-centric "middleware".

CISC 889-010 MACHINE LEARNING

Studies computing systems that improve their performance with experience. Focuses on improving understanding of the underlying algorithms used in various widely-studied learning methods. Demonstrates how they are being used.

COMMUNICATION

COMM 367-050 MIDTERM ELECTIONS LECTURE SERIES

This 1-credit course consists of 12 lectures that focus on the 2010 midterm elections. The series highlights UD's place at the epicenter of politics. Lectures given by scholars and national political experts in a variety of fields.

COMM 418-011 SPORTS AND THE MEDIA

Explores the relationship that exists between sports and the media (primarily television), including the ways in which sports influences media and the ways media influences college & professional sports.

COMM 442-010 SMALL GROUP COMMUNICATION

Examines the role(s) of mass media in society, and the various ways for holding media accountable for meeting those responsibilities. Studies theory and research relevant to various aspects of small group decision making; and the functions communication performs during the discussion. Includes practicing group skills and using recordings to analyze small group communication.

COMPUTER & ELECTRICAL ENGINEERING

CPEG 667-010 RESEARCH DIRECTIONS IN SOFTWARE ENGINEERING

Studies concepts, methods, and tools for the analysis, design, construction and measurement of complex software-intensive systems. Emphasizes principles and covers state-of-the-art software engineering and promising research areas.

AMERICAN MATERIAL CULTURE (Winterthur Program)

EAMC 667-010/MSST 667-010 EXHIBITIONS

Intro to exhibit development basics: interpretive programming, budgeting, funding and sponsorship, roles of curators, conservators, registrars; scheduling, graphics preparation, fabrication contracts, and design.

EDUCATION

EDUC 867-011 ISSUES IN CAMPUS PERSONNEL MANAGEMENT

Prepares students with a broad understanding of personnel management as they prepare for careers as campus leaders at colleges and universities. Focuses on access and equity; diversity and higher education and legal issues that impact success.

ELECTRICAL & COMPUTER ENGINEERING

ELEG 467- 011/ 667-011 IMAGE PROCESSING WITH GPUS AND FPGAS

Tasks like image restoration and exploitation can overwhelm current computers. We show techniques for designing algorithms and systems capable of high-performance and real-time image processing using computational platforms like FPGAs, DSPs, and GPUs.

ELEG 467-012/CPEG 467-012 SPECIAL PROJECTS IN ECE

Students work singly or in small groups on engineering projects, mostly in the areas of signal processing and computer engineering. Students will produce progress and final reports for distribution to industrial and government sponsors.

ELEG 667-010 INTRODUCTION TO ELECTROMAGNETIC SCATTERING & RCS

Course introduces students to the fundamental theoretical, numerical and experimental methods used for electromagnetic scattering and radar cross section (RCS) applications.

ENGLISH

ENGL 267-010 INTRODUCTION TO RHETORIC & WRITING STUDIES

Discusses the history and theory of rhetoric, writing, and literacy. Introduces research and best practices in the teaching of writing.

ENGL 367-010 JOURNALISM AND THE MIDDLE EAST

Examines how print, broadcast and web publications cover the conflict in the Middle East. Discusses journalism skills, social media impact and the challenge of objectivity.

ENGL 367-011 NARRATIVE WRITING WORKSHOP: THE NEED FOR STORY

Workshop covering personal narratives, narrative stories from interviews, personal narratives within academic writing and digital story telling. Includes workshop conferencing, editing sessions and instructional writing lessons.

ENGL 667-010 INTRODUCTION TO GRADUATE STUDIES IN ENGLISH

Designed to introduce students to the basics of graduate level research and writing. Studies critical methods through representative essays from a range of approaches.

ENVIRONMENTAL SCIENCE

ENSC 167-010 INTRODUCTION TO THE ENVIRONMENT

Provides an overview of the fields of environmental science and studies. Introduces the science and policy associated with environmental work and exploration of specific issues, perspectives, and approaches from these varied areas.

ENTREPRENEURSHIP

ENTR 167-010 EVER THOUGHT OF STARTING YOUR OWN BUSINESS?

Learn critical and creative steps to getting started. Consider being your own boss. Meet local entrepreneurs who will share their secrets of success. This lively and interactive class explores venture creation and launching your own business.

FASHION

FASH 467-010 DESIGN EXPRESSIONS

Apparel design capstone course integrates advanced apparel design techniques and experiences as students design a collection of ensembles based on a theme incorporating social, cultural or environmental sustainability. Emphasizes articulating the design process through oral, written, and visual methods. May include a field trip.

FINANCE

FINC 667-010 CAREER DEVELOPMENT IN FINANCE

Opportunity to learn about careers in the financial services industry from industry professionals. Develops your professional network, and prepares you for your career and job search.

FOREIGN LANGUAGES & LITERATURE

FLLT 367-010/JWST 367-010 ISRAELI FILM

Study of fascinating topics in film, such as the sabra, women, ethnic groups, changes in Israeli society and its different components.

FRENCH

FREN 667-010 THE FRANCOPHONE WORLD

Close examination of Francophone literatures and cultures (Asia, Canada, the Caribbean, and Africa), and historical overview of 'Francophone'.

GEOGRAPHY

GEOG 467-050/GEOG 667-050 ENVIRONMENTAL VIDEOGRAPHY

Learn to use video to document all aspects of the Geography discipline, as well as Environmental Science. Studies basic video production techniques by producing short video productions w/geographical content. Must have own external hard drive.

GEOG 467-051/GEOG 667-051 TRANSPORTATION GIS

Teaches GIS-based routing and transportation modeling and analysis. Introduces working with network datasets, advanced connectivity models and multimodal networks. Applications in transportation, logistics, public safety, local government.

GEOG 467-052/GEOG 667-052 PYTHON SCRIPTING

Intro to geoprocessing scripts. Teaches Python scripting skills that could be utilized to simplify processes & automate geoprocessing operations & GIS data mngt. Covers basics of Python scripting syntax, objects, creation of script tools & debugging.

GEOG 467-053/ GEOG 667-053 WEB GIS

Intro to ArcGIS Server, publishing GIS content online, bldg web mapping apps, providing various online GIS services & resources (map servs, 3D servs, geodata servs), working w/GIS services in a variety of webbased clients ArcGIS Explorer, web mapping.

GEOLOGY

GEOL 467-010/GEOL 667-010 DATA VISUALIZATION

Introduce techniques for multi-dimensional data visualization. Students will draw from their research to form basis of project aimed at enhancing synthesis/visualization of data. Use of Google Earth Pro, Fledermaus and other software.

GERMAN

GRMN 267-010 READINGS FOR CULTURAL AWARENESS

Reading and discussion of a broad range of topics and genres aimed at furthering knowledge of and sensitivity to the cultures of German speaking countries.

GRMN 355-010 ADVANCED GERMAN GRAMMAR AND COMPOSITION

Designed for comprehensive grammatical review and refinement of accuracy in advanced grammar. Reinforcement through exercises that provide active practice. Includes ample opportunity for real-life speaking contexts.

HUMAN DEVELOPMENT & FAMILY STUDIES

HDFS 475-010 HEALTH AND AGING

Provides an overview of the fundamental aspects of healthy aging. Emphasizes developmental issues of bodily change over time, the aging process, preventative care and positive health practices. Includes ways to maximize health and longevity.

HEALTH & EXERCISE SCIENCES

HESC 167-010 ISSUES OF LIFESTYLE AWARENESS FOR ATHLETIC TRAINERS

Exploration into the basic principles of healthy lifestyle awareness necessary for athletic training students to satisfy the educational competencies mandated by the National Athletic Trainers Association.

HESC 167-011 STRESS MANAGEMENT

Designed to help students understand the positive and negative impact of stress in their lives. Identify the major causes of their stress and how to effectively manage their day to day stressors.

HESC 267-010 ADVENTURE CHALLENGE: ACTIVITIES AND LEADERSHIP

Introduces basic components of adventure challenge learning. Practical experience in developing leadership skills and understanding the dynamics of groups in adventure learning is integrated. Examines a range of experiential activities.

HESC 667-010 TWELVE-LEAD ELECTROCARDIOGRAM INTERPRETATION

Study of all aspects of electrocardiography including arrhythmia identification, rate determination, axis deviation, heart blocks, hypertrophy and myocardial infarction patterns.

HISTORY

HIST 367-013 AMERICAN JEWISH HISTORY

Examines the history of Jews and Judaism in the United States from 1654 to today.

HIST 367-440 AMERICAN SPORTS HISTORY

Traces major developments in American sports history since the Civil War.

HIST 367-012 AMERICA IN THE 1960S

Examines the history of the 1960s, a decade of profound social transformation and unrest in America.

ITALIAN

ITAL 455-010, 080 CHILDREN IN CONTEMPORARY ITALIAN LITERATURE

Explores how different authors approach this phase of development and what lessons a reader can learn from their works. Reading and analysis of such authors as Ammaniti, Baricco, Giordano, Mazzucco, Veronesi. Includes film clips and movies.

LINGUISTICS & COGNITIVE SCIENCE

LING 167-010 KA'VI, KLINGON & ELVISH: LANGUAGES CREATED FOR BOOKS & FILM

Examines what goes into creating a realistic, believable language by examining some of the most famous languages invented by authors and film makers, to give the worlds created in their books and films greater depth and verisimilitude.

MASTER OF ARTS IN LIBERAL STUDIES

MALS 626-410 STUDIES IN CONTEMPORARY CULTURE; THE NATURE OF GOOD AND EVIL

Explores the concepts of good and evil as they are presented in religion, ethics, literature (including film), and psychology.

MECHANICAL ENGINEERING

MEEG 467/667-010 MICROELECTROMECHANICAL SYSTEMS

Examines the mechanical, optical, fluidic, chemical, and biological devices that can be derived using modern micro-fabrication methods. Includes typical fabrication steps, device physics and mechanics, and a survey of existing and emerging device areas. Prereqs: MSEG302, PHYS245.

MEEG 467-011 COMPOSITES MATERIALS

Fiber and matrix materials, fiber-matrix interface, polymer, metal, ceramic and carbon matrix composites, geometric aspects, elastic properties, lamination theory, strength of unidirectional composites, strength of laminates, durability, hybrid composites.

NUTRITION & DIETETICS

NTDT 167-010 NUTRITION FOR HEALTH & SPORT

Nutrition for optimizing health and performance among student athletes including appropriate selection of foods, fluids, and supplements to accommodate sport-specific nutrient needs and body weight/body composition goals.

PHYSICS

PHYS 838-010 NEW PHYSICS AT LARGE HADRON COLLIDER

Topics related to various physics goals set by the Large Hadron Collider (LHC) at CERN, Switzerland: Higgs Boson, Electroweak Symmetry Breaking, Supersymmetry, Dark Matter, Extra Dimensions and Mini Black Holes. Quantum Field Theory PHYS822 helpful.

SOCIOLOGY

SOCI 367-010 GLOBAL POLICY & INEQUALITY

Explores the relationship between social policy and social inequality in the U.S. and comparable societies. Specific social policy areas include employment, family, health care, education, social security, welfare, and affirmative action policies.

SOCI 367-011 LATIN AMERICAN MIGRATION

Explores the post WWII migrations to the United States of Mexicans, Dominicans, Puerto Ricans, Cubans, Central Americans and Jamaicans and their transnational migrant communities.

SOCI 467-010 RACE & GENDER BETWEEN THE WARS

Explores the path breaking period between WWI and WWII. Examines changes in race and gender during the great migration, roaring twenties, and great depression, from the perspective of contemporary and recent literature.

SOCI 467-011 RACE AND SEXUALITY

Explores the connections between cultural constructions of racial, gender and sexual identity. Examines the racialization of sexuality as an instrument of racial domination.

SOCI 667-010 YOUTH AND JUSTICE

Explores the social construction of youth and social institutions that deal with youth. Includes the policing and punishment of youth in juvenile justice agencies as well as educational systems and other social institutions.

SOCI 667-011 APPLICATIONS IN LONGITUDINAL ANALYSIS

Practical statistical techniques for analyzing longitudinal and multilevel data in the social sciences. Explores specific techniques including event history analysis, time-series analysis, and generalized linear and nonlinear mixed models.

URBAN AFFAIRS & PUBLIC POLICY

UAPP 467-010 CIVIL RIGHTS LAW & POLICY

Examines the origin and evolution of the laws and policies that govern the rights of African-Americans and other people of color in the United States. Includes emerging approaches to civil rights scholarship and considers the implications of the Supreme Court's recent embrace of a conservative posture in civil rights issues.

UAPP 667-011 CURRENT ISSUES; INTERNATIONAL DEVELOPMENT

Examines critical issues in the field and explores the methods and practices that governments, international organizations and universities use to address these issues. Includes case studies, discussions, theory and practice of international development; U.S. government foreign assistance agencies/programs.

UAPP 667-017 PUBLIC POLICY & MANAGEMENT IN THE US

Examines the political economy of U.S. public policy including the sources and types of policy, the intersection of policy with politics, and the institutional and structural dimensions of the national policymaking process.

UAPP 667-021 COMPARATIVE PUBLIC ADMINISTRATION/ROMANIA

Provides background on governance systems that will help students in the practice of public administration at home and abroad. Includes concepts, organizing, financing and assessing governance in public, private and NP sectors.