
Africana Studies

AFRA 205-011: Contemporary African American Issues

ENVIRONMENTAL JUSTICE

Examines environmental justice efforts driven by African-Americans/people of color as response to polluting companies & racial/economic disparities in the application of environmental protections; some of the major struggles have shaped/reshaping how we define the "environmental movement".

AFRA 206-010: Survey of African American Culture

WAGES OF WHITENESS

Whiteness studies focuses on how "White" developed as a racial category and how various ethnic/national groups came to be included under that racial label. We will examine the socio-historical construction of Whiteness, the evidence of its privileging effects, and what solutions can be offered.

Animal and Food Sciences

ANFS 467-010: SEMINAR

EVOLUTIONARY MEDICINE

The concepts of evolution provide a background for understanding modern medicine. This course will review the fundamental principles of evolution and discuss how evolution impacts the health and disease susceptibility of various animal species

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Arts and Science

ARSC 300-010: Issues in Global Studies

MONSTERS IN WORLD CULTURE

Ancient werewolves and sea monsters, Frankenstein in Baghdad, the Golem of Prague, Godzilla and Pokemon, Russian zombie soldiers, Mexican Mummy Mashup (Day of the Dead); the Hindu Rashtra, Spanish serranas (wild women); Delaware's own monstrous slave trader Patty Cannon, and more! Vampires, too.

Art Conservation

ARTC 464-006: Preservation Internship

PAINTINGS CONSERVATION II

Students will each do a complete examination & condition report on a painting, workshops in retouching, filling, cleaning, tear mending, participate in reading seminars of key conservation literature, learn proper methods of care & handling of collection objects, examine paintings w/ultra-violet.

ARTC 464-010: Preservation Internship

PAINTINGS CONSERVATION I

Students will each do a complete examination & condition report on a painting, workshops in retouching, filling, cleaning, tear mending, participate in reading seminars of key conservation literature, learn proper methods of care & handling of collection objects, examine paintings w/ultra-violet.

ARTC 464-016: Preservation Internship

OBJECTS - INORGANICS

Focus is on the conservation of 3-dimensional artifacts and will address examination, documentation, ethics, and health and safety. Course content will primarily be delivered through practical work, discussion, and research assignments.

ARTC 464-017: Preservation Internship

OBJECTS CONSERVATION

Focuses on the conservation of 3-dimensional artifacts and will address examination, documentation, ethics, and health and safety. Course content will primarily be delivered through practical work, discussion, and research assignments.

ARTC 464-018: Preservation Internship

COLLECTIONS CARE INTERNSHIP

Students will work to inventory and survey materials held by the National Academy of Design. This work will support the Academy's strategic plan to expand the collection's visibility and accessibility as a public resource and to achieve the highest caliber of documentation and stewardship.

Art History

ARTH 420-010: Seminar in African Art

AFRICA AND MODERNISM

Theorizes "Modern Africa" to after the 1960s Biafra War. Engages Negritude and other Independence arts, atypically around Nigerian Clara Ugbodaga, Egyptian Effat Naghi, South African Marlene Dumas, "Black" Picasso, Sudanese Ibrahim El Sahali, and activists Marcus Garvey and Prince Hou"nou of Dahom".

ARTH 421-080: Seminar in Nineteenth Century Art

DRAWN AND PRINTED: ART ON PAPER

Art on paper with visits to print/drawing collections and by guest experts. Topics include study of materials and techniques; interactions with painting; observation; drawing from life; the sketch; caricature; modernist experimentation; the book; originality and reproduction; prints and politics.

ARTH 435-011, 081: Seminar in American Art

MONUMENTS AND AMERICAN MEMORY

By looking at monuments, this seminar asks how American society remembers and, in turn, represents itself. We will examine how memorials can both inform and undermine contemporary social identities.

**ARTH 435-080: Seminar in American Art
SCALE IN VAST EARLY AMERICA**

Recognizing that scale is always about power, this seminar investigates material and visual culture to ask how scale related to gender, race, transatlantic movement, knowledge production, protest, and cross-cultural encounters, as well as affect and the haptic. Class meets often at Winterthur Museum.

**ARTH 602-010: Seminar: Curatorial Studies
EXHIBITING THE CARCERAL STATE**

This research-based curatorial seminar will consider the dynamics of the exhibition hall and the carceral state via critical study of an array of curatorial projects past and present attending to the modern state's arresting mechanisms of surveillance, policing, the courts, and the prison.

**ARTH 620-010: Seminar in African Art
AFRICA AND MODERNISM**

Theorizes "Modern Africa" to after the 1960s Biafra War. Engages Negritude and other Independence arts, atypically around Nigerian Clara Ugbodaga, Egyptian Effat Naghi, South African Marlene Dumas, "Black" Picasso, Sudanese Ibrahim El Sahali, and activists Marcus Garvey and Prince Hou"nou of Dahom".

**ARTH 621-010: Seminar in Nineteenth Century Art
DRAWN AND PRINTED: ART ON PAPER**

Art on paper with visits to print/drawing collections and by guest experts. Topics include study of materials and techniques; interactions with painting; observation; drawing from life; the sketch; caricature; modernist experimentation; the book; originality and reproduction; prints and politics.

**ARTH 635-010: Seminar in American Art
SCALE IN VAST EARLY AMERICA**

Recognizing that scale is always about power, this seminar investigates material and visual culture to ask how scale related to gender, race, transatlantic movement, knowledge production, protest, and cross-cultural encounters, as well as affect and the haptic. Class meets often at Winterthur Museum.

Behavioral Health & Nutrition

**BHAN 130-010, 018, 019: Health Toics
COOK IT HEALTHY**

Designed as an introduction to the basic principles of food preparation, including an understanding of food and kitchen safety and sanitation, basics of healthy cooking methods and recipe adaptation to improve nutritional value and health.

**BHAN 130-012: Health Toics
DEATH AND DYING**

Examines death/dying in multiple cultures and perspectives including the dying/grieving processes, death's inevitability, death of loved ones, general public, mass casualties, pandemics, rituals, bereavement practices and ways to face life and death with no regrets.

BHAN 130-020: Health Toics
COOKING AROUND THE WORLD

Designed as an introduction to the basic principles of food preparation, including an understanding of food and kitchen safety and sanitation while exploring cuisines from various cultures throughout the world.

BHAN 130-021: Health Toics
TAKEOUT MAKEOVER

Designed as an introduction to the basic principles of food preparation, including an understanding of food and kitchen safety and sanitation. Emphasis will be given to the basics of healthy cooking methods and recipe adaptation to improve nutritional value and health.

BHAN 130-022, 024: Health Toics
PERSONAL RELATIONSHIPS

Examines healthy relationships including: communication skills, conflict resolution, expectations, personality characteristics, culture, family of origin, roles, responsibilities, boundaries, long distance relationships, intergenerational relationships, power, sacrifice and intimacy.

BHAN 130-023: Health Toics
HEALTH & VIRTUES

Examines the positive relationship between healthy living and living a virtue-filled life, including specific traditional virtues along with examining their opposites " the traditional vices" from both secular and various religious sources. Living a "good" life is absolutely healthy.

BHAN 130-028, 029: Health Toics
PERSONAL MANAGEMENT

Examines how to take responsibility for their health behaviors and live a healthy and productive life in the face of stressors. Course will look at the concept of resiliency and examine the eight individual pillars of resiliency and ways to incorporate them into our individual lives.

BHAN 130-033: Health Toics
SUSTAINABILITY & FOOD

An introduction to the use of local/seasonal produce and sustainable cooking, including an understanding of food cultivation at the UD Farm, strategies/tips for eating seasonally, getting the most out of local produce year-round, cooking methods and store-bought ingredients to produce meals at home.

BHAN 130-190, 196: Health Toics
MANAGING WORK STRESS

Explores the elements of work stress at the individual, interpersonal, organizational, and environmental levels. Students will develop valuable skills in preparation for the 21st century marketplace that can contribute to health, happiness, and a better quality of work life.

BHAN 464-010: Health Behavior Science Internship

HEALTH BEHAVIOR SCIENCE

Internship is part of the pre-professional program in which students spend full time working in an agency with a supervising health professional. The student will be able to make practical use of principles, methods, knowledge, and skills learned during their academic career.

Bioinformatics

BINF 667-014: SEMINAR

INTRODUCTION TO BIostatISTICS - BIOMEDICAL APPLICATIONS

This course introduces the basic principles and methods of biostatistics, providing students a sound methodological foundation for medical research.

BINF 667-015: SEMINAR

SCIENTIFIC REPRODUCIBILITY AND RESPONSIBLE CONDUCT

Scientific Reproducibility and Responsible Conduct will be team-taught by program faculty, covering the topics of responsible conduct of research, scientific rigor and reproducibility, ethics, diversity, and equity. The course will engage faculty and students in problem-based learning di

BINF 667-016: SEMINAR

ETHICS IN DATA SCIENCE AND ARTIFICIAL INTELLIGENCE.

Scientific Reproducibility and Responsible Conduct will be team-taught by program faculty, covering the topics of responsible conduct of research, scientific rigor and reproducibility, ethics, diversity, and equity. The course will engage faculty and students in problem-based learning di

Biological Sciences

BISC 467-010: SEMINAR

NEUROGENETICS OF BEHAVIOR

Introduction to the research field of neurogenetics, which is a frontier area in neuroscience to test specific hypotheses concerning the genetic control of behavior and neurological disease using various animal model systems and techniques such as genetics, genomics, and behavioral neurobiology.

BISC 467-011: SEMINAR

MICROBIAL GENETICS

Explores the mechanisms of microbial genetics with a focus on experimental techniques. Students will read, evaluate and present on the primary scientific literature. Topics to include bacterial gene structure, gene regulation, and genetic manipulation of bacteria. Prereqs: BISC300.

BISC 667-010: SEMINAR

INTRODUCTION TO NEUROGENETICS

Introduction to the research field of neurogenetics, which is a frontier area in neuroscience to test specific hypotheses concerning the genetic control of behavior and neurological disease using various animal model systems and techniques such as genetics, genomics, and behavioral neurobiology.

BISC 667-011: SEMINAR**MICROBIAL GENETICS**

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BISC 850-010: Advanced Topics in Biology**MOLECULAR EVOLUTION-BACTERIA**

One-credit course based on primary research literature. Each week a research article assigned by the instructor in the area of molecular microbiology (special topic Fall 2022 bacterial signaling in pathogenesis) is presented by a class member.

BISC 850-011: SEMINAR**INTRO TO GRANT WRITING**

Course will walk students through the process of preparing for applications for funding to perform scientific investigations and/or fund their graduate training.

Biomechanics and Movement Science**BMSC 867-010: SEMINAR****CULTURE AND COMMUNICATION IN REHABILITATION RESEARCH**

Elevates students' knowledge and skill in the effective verbal, nonverbal and written communication in their area of rehabilitation research. Build a personalized process focused on becoming a flexible, adaptive, clear, compelling communicator in the service of science.

Biomedical Engineering**BMEG 467-010: SEMINAR****LOW-RESOURCE MED DEVICE DESIGN**

Students will gain practical knowledge of low-resource settings, and learn how to design medical devices that are affordable, robust, easy-to-use and mass-producible. The course will be delivered through a hands-on learning experience using case-study scenarios.

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Business Administration**BUAD 429-010: Selected Topics in Management****MANAGE CHANGE IN ORGANIZATIONS**

How organizations and the individuals in them can respond effectively to changes both internal and external to the organization.

Business & Economics

BUEC 167-010: SEMINAR

DISCOVER YOUR SUCCESS

Explores the learning process to assist students in accomplishing academic success. The goal of this course is to help improve students' effectiveness in the areas of academic, self-direction, self-supervision, and campus resource familiarity and utilization.

Cognitive Science

CGSC 451-010, 081: Topics in Cognitive Science

NEURAL & COGNITIVE DEVELOPMENT

Introduces the principle methods, findings, and theories of the nervous system. Topics include the anatomy and physiology of the nervous system, and how the nervous system gives rise to perception, action, language, and memory across human development.

CGSC 451-011, 080: Topics in Cognitive Science

SOCIAL COGNITION

Focuses on developmental, neural, and cognitive aspects of skills that play an important role in a one's ability to interact and communicate socially. Examples include facial recognition, emotion identification, empathy, and prosocial behavior. May be repeated for credit when topics vary.

CGSC 651-010: Topics in Cognitive Science

NEURAL & COGNITIVE DEVELOPMENT

Introduces the principle methods, findings, and theories of the nervous system. Topics include the anatomy and physiology of the nervous system, and how the nervous system gives rise to perception, action, language, and memory across human development.

CGSC 890-012: Studies in Linguistics

THE LANGUAGE-VISION INTERFACE

We will explore central questions about the language-vision interface, drawing from classic cognitive-science texts and more recent literature suggesting that visual processing is more sophisticated than is traditionally assumed, and interacts with language in rich ways we are only now discovering.

Chemical Engineering

CHEG 667-010: SEMINAR

MOLECULAR MODELING AND SIMULATION OF SOFT MATERIALS

An overview of molecular modeling and simulation methods. Coarse-grained models, atomistic models, and multi-scale models. Molecular dynamics and Monte Carlo simulations in various ensembles.

CHEG 667-011: SEMINAR

INTRODUCTION TO SYNTHETIC BIOLOGY

An overview of Synthetic Biology and a wide variety of their its applications. Topics include biological parts, their combination into devices, and construction of circuits and systems. Translation to application is emphasized.

Prereq: BISC207, CHEG 429, CHEM527 (or Consent of the Instructor).

**CHEG 667-012, 013: SEMINAR
INTRO TO DATA AND SYSTEMS**

**CHEG 867-010: SEMINAR
ADVANCED MOLECULAR MODELING AND SIMULATION OF SOFT MATERIALS**

An overview of molecular modeling and simulation methods. Coarse-grained models, atomistic models, and multi-scale models. Molecular dynamics and Monte Carlo simulations in various ensembles.

**CHEG 867-011: SEMINAR
ADVANCED INTRODUCTION TO SYNTHETIC BIOLOGY**

An overview of Synthetic Biology and a wide variety of their its applications. Topics include biological parts, their combination into devices, and construction of circuits and systems. Translation to application is emphasized.

Prereq: BISC207, CHEG 429, CHEM527 (or Consent of the Instructor).

Chemistry and Biochemistry

**CHEM 667-011: SEMINAR
ADVANCED ORGANIC CHEMISTRY: STRUCTURE AND MECHANISM**

Structure and reactions of organic molecules with emphasis on reaction mechanisms.

**CHEM 667-012: SEMINAR
PHYSICAL METHODS IN INORGANIC CHEMISTRY**

Physical methods used to investigate the geometric and electronic structure of inorganic and organometallic compounds. Techniques include electrochem methods, EPR, Mossbauer, multinuclear NMR, and x-ray spectroscopies, magnetic measurements, neutron scattering, and surface techniques. Prereq CHEM457.

**CHEM 667-013: SEMINAR
EXPERIMENTAL ORGANIC CHEMISTRY**

Introduces graduate students to organic research. Students learn various lab techniques (reaction design, setup, monitoring, chromatography, isolation, characterization, notebook keeping) as well as the use of chemical databases, literature searching and other tools for their research.

**CHEM 850-010: Special Topics in Inorganic Chemistry
NANOCHEMISTRY**

Covers a range of nanomaterials syntheses and the chemistry behind these. We will also survey common characterization techniques, discuss unique emerging properties and applications of nanomaterials. This course is accessible to graduate and upperclass students in Chemistry, Materials Science, Physics and Engineering.

**CHEM 865-010: Seminar
NEW STUDENTS**

**CHEM 865-011: Seminar
BIOCHEMISTRY**

**CHEM 865-012: Seminar
INORGANIC/ORGANIC SEMINAR**

CHEM 865-013: Seminar
PHYSICAL

CHEM 865-014: Seminar
COLLOQUIA SEMINAR

CHEM 865-015: Seminar
ANALYTICAL

Chinese

CHIN 355-010, 080: Special Topics
MULTIMEDIA CHIN CULT & SOCIETY

Designed to improve students' integrated language skills through dialogues from TV programs and films. Students will develop abilities to comprehend authentic language materials, understand features of spoken and written Chinese, and produce paragraph-level writing on familiar topics.

Computer and Information Sciences

CISC 187-011: Vertically Integrated Projects I
CISC 287-011: Vertically Integrated Projects II
CISC 387-011: Vertically Integrated Projects III
CISC 487-011: Vertically Integrated Projects IV
SPATIAL COMPUTNG

CISC 187-012: Vertically Integrated Projects I
CISC 287-012: Vertically Integrated Projects II
CISC 387-012: Vertically Integrated Projects III
CISC 487-012: Vertically Integrated Projects IV
VIP: CLOUD CRYPTO

The Cloud Crypto team has several aims. We are working actively on ATM security using biometrics, Blockchain voting systems, Penetration Testing, Secure Software Design, and Fully Homomorphic Encryption. Overall, this project aims to create practical and economically disruptive security solutions.

CISC 187-013: Vertically Integrated Projects I
CISC 287-013: Vertically Integrated Projects II
CISC 387-013: Vertically Integrated Projects III
CISC 487-013: Vertically Integrated Projects IV
VIP: HIGH PERFORMANCE COMPUTING CODE TO SCALE

Compute nodes pose thousand-way parallelism between parts of application, such as task parallelism, process-level and thread-level parallelism within a process and a core, along with hardware multithreading, instruction-level parallelism and pipelining of instructions.

CISC 187-015: Vertically Integrated Projects I
CISC 287-015: Vertically Integrated Projects II
CISC 387-015: Vertically Integrated Projects III
CISC 487-015: Vertically Integrated Projects IV
VIP: ACOUSTICS & SIGNAL PROCESS

The Acoustic Engineering and signal processing laboratory in Electrical and Computer Engineering Department seeks to develop understanding in variety of fields related to sound propagation and engineering. These include instrumentation, signal processing and analysis, as well as algorithm development.

CISC 187-016: Vertically Integrated Projects I
CISC 287-016: Vertically Integrated Projects II
CISC 387-016: Vertically Integrated Projects III
CISC 487-016: Vertically Integrated Projects IV
VIP: DRONE

The FLIE " Flying Labs employing Intelligent Engineering " project seeks to develop algorithms, methods, and systems to enable drones that function as autonomous flying labs that address challenging contemporary problems.

CISC 187-017: Vertically Integrated Projects I
CISC 287-017: Vertically Integrated Projects II
CISC 387-017: Vertically Integrated Projects III
CISC 487-017: Vertically Integrated Projects IV
VIP: SCOOTERSV2

CISC 187-019: Vertically Integrated Projects I
CISC 287-019: Vertically Integrated Projects II
CISC 387-019: Vertically Integrated Projects III
CISC 487-019: Vertically Integrated Projects IV
VIP: INTERNET OF THREATS

Internet-of-Things (IoT) is a global information network that allows different smart devices (or "things") to collect and exchange data seamlessly. What comes with this trend, however, is an Internet-of-Threats: sophisticated attacks can be initiated from any IoT device over the Internet.

CISC 187-020: Vertically Integrated Projects I
CISC 287-020: Vertically Integrated Projects II
CISC 387-020: Vertically Integrated Projects III
CISC 487-020: Vertically Integrated Projects IV
CODING QUANTUM GAMES

CISC 187-021: Vertically Integrated Projects I
CISC 287-021: Vertically Integrated Projects II
CISC 387-021: Vertically Integrated Projects III
CISC 487-021: Vertically Integrated Projects IV
AMBASSADORS FOR ELECTRICAL AND COMPUTER ENGINEERING

Promote UD ECE Department and STEM Education thru UD centric hardware and software.

CISC 187-022: Vertically Integrated Projects I

CISC 287-022: Vertically Integrated Projects II

CISC 387-022: Vertically Integrated Projects III

CISC 487-022: Vertically Integrated Projects IV

NEUROMORPHIC COMPUTING - BUILDING ARTIFICIAL INTELLIGENCE DEVICES WITH BRAIN-LIKE ENERGY-

Develop new generation of computing hardware and algorithms that can realized Artificial Intelligence (AI) on portable edge devices. Emphasis will be on using neural-inspired, or Neuromorphic Architectures, that can allow brain-like energy efficiency.

CISC 187-023: Vertically Integrated Projects I

CISC 287-023: Vertically Integrated Projects II

CISC 387-023: Vertically Integrated Projects III

CISC 487-023: Vertically Integrated Projects IV

COMPUTING FOR SOCIAL GOOD

Students will join teams to iteratively design, build, and evaluate software, data, and cyber-physical systems using methods from Human-Computer Interaction, Ubiquitous Computing, Human-Centered Design, and Psychology.

CISC 187-024: Vertically Integrated Projects I

CISC 387-024: Vertically Integrated Projects III

CISC 487-024: Vertically Integrated Projects IV

DIGITAL EDUCATION

CISC 367-011: SEMINAR

EQUITY/INCLUSION IN COMPUTING

CISC 449-010: Topics in Computer Applications

INTERNET SECURITY WITH MOBILE AND IOT DEVICES

Covers the principles and practice of Internet security, with a focus on understanding attack paths/countermeasures for mobile and IoT systems. Includes hands-on experience/labs, research paper discussion, and interactive lectures.

CISC 649-010: Topics in Computer Applications

INTERNET SECURITY WITH MOBILE AND IOT DEVICES

Covers the principles and practice of Internet security, with a focus on understanding attack paths/countermeasures for mobile and IoT systems. Includes hands-on experience/labs, research paper discussion, and interactive lectures.

CISC 849-010: Advanced Topics in Computer Applications

CYBERSECURITY IN IOT, MACHINE LEARNING, AND BLOCKCHAIN

Covers the security and privacy issues in mobile and IoT systems, machine learning applications, and decentralized systems enabled by blockchain. Topics include denial-of-service attacks, side-channel attacks, and adversarial machine learning. Recent top-tier research papers will be discussed.

Communication

COMM 200-010: Topics in Communication

HAPPINESS AND WELL-BEING

Communication is the foundation of happiness, wellbeing and positive engagement. Class topics include social scientific, philosophical, and applied approaches to social support, achievement, appreciation, and purpose as they intersect with practices of IP, group and organizational communication.

COMM 337-050: Topics in Political Communication

POLITICS BY THE NUMBERS

From clicks to ballots, a film series looking at what counts in an election year. A companion course to the National Agenda Speaker Series featuring documentaries and theatrical releases.

COMM 418-010: Advanced Topics in Media Communication

SPORTS MEDIA AND COMMUNICATION

Provides students with a foundational knowledge of issues in sports from the perspective of media communication. Focusing on both theoretical concepts and practical applications, students will explore topics like mass media, social media, gender, race, technology, and emerging sports.

COMM 418-011: Advanced Topics in Media Communication

FREEDOM OF EXPRESSION

Discusses recent controversies over limits on freedom of speech and press; considers issues such as freedom of religion and assembly during the Coronavirus crisis, corporate encroachment on privacy, false advertising, incitement to violence, cyberbullying & cyberstalking.

COMM 440-010: Topics in Interpersonal Communication

STRESS & COPING THROUGH COMM

Introduces students to contemplative practices that may help alleviate strife when it occurs within our relationships. Students will become acquainted with and engage in numerous contemplative practices and asked to draw from scholarly research to reflect upon their experiences.

COMM 440-011: Topics in Interpersonal Communication

COMM FOR EFFECTIVE LEADERSHIP

Gain a greater understanding of the principles and challenges behind effective and ethical leadership, insight into our own leadership styles and potential, and become more effective in taking charge of our own lives as well as leading others in educational and professional contexts.

COMM 442-010, 080: Topics in Organizational Communication

COMM. AND SOCIAL PROTEST

Explores the communication strategies, political issues, and public arguments of social protest and social movements around the world. Examines propaganda, demagoguery, and dissent in civil society, including the strategies and tactics of leaders, supports, and opponents of social movements.

COMM 447-010: National Agenda
NATIONAL AGENDA 2022: POLITICS BY THE NUMBERS

Seminar offered in conjunction with speaker series focused on current policy and political problems facing the United States. When it comes to elections - especially high-stakes elections like the upcoming midterms - the numbers matter.

COMM 803-010: Topics in Communication Research Methods
COMM SURVEY RESEARCH METHODS

Introduces students to the fundamental principles and best practices of survey design. Emphasizes the development of skills to design and implement surveys and analyze survey data. Topics to be covered include sampling, modes of data collection, questionnaire construction, and sources of bias.

Criminal Justice

CRJU 467-010: Seminar
CRITICAL ISSUES IN POLICING

Course is designed to allow students to learn more about police procedures and techniques and connect academy experience and knowledge to critical policing issues. Students must participate in and complete the Citizen Police Academy (CPA) administered by the UD police.

Education

EDUC 240-010: Legal and Ethical Issues in American Education
LEGAL AND ETHICAL ISSUES IN ED

Addresses basic animating principles of the U.S. education system. Syllabus topics are organized around three basic legal and ethical ideals: conscience, liberty, and equality.

Electrical Engineering

ELEG 187-011: Vertically Integrated Projects I
ELEG 287-011: Vertically Integrated Projects II
ELEG 387-011: Vertically Integrated Projects III
ELEG 487-011: Vertically Integrated Projects IV
SPATIAL COMPUTNG

ELEG 187-012: Vertically Integrated Projects I
ELEG 287-012: Vertically Integrated Projects II
ELEG 387-012: Vertically Integrated Projects III
ELEG 487-012: Vertically Integrated Projects IV
VIP: CLOUD CRYPTO

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ELEG 387-013: Vertically Integrated Projects III
ELEG 487-013: Vertically Integrated Projects IV
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VIP: SCOOTERSV2

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ELEG 487-020: Vertically Integrated Projects IV
CODING QUANTUM GAMES

ELEG 187-021: Vertically Integrated Projects I

ELEG 287-021: Vertically Integrated Projects II

ELEG 387-021: Vertically Integrated Projects III

ELEG 487-021: Vertically Integrated Projects IV

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ELEG 387-022: Vertically Integrated Projects III

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NEUROMORPHIC COMPUTING - BUILDING ARTIFICIAL INTELLIGENCE DEVICES WITH BRAIN-LIKE ENERGY-

Develop new generation of computing hardware and algorithms that can realized Artificial Intelligence (AI) on portable edge devices. Emphasis will be on using neural-inspired, or Neuromorphic Architectures, that can allow brain-like energy efficiency.

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ELEG 287-024: Vertically Integrated Projects II

ELEG 387-024: Vertically Integrated Projects III

ELEG 487-024: Vertically Integrated Projects IV

DIGITAL EDUCATION

ELEG 467-014: SEMINAR

MACHINE LEARNING SYSTEMS

Focuses on mathematical conceptualization, statistical estimation, computational implementation and optimization. Topics covered- data models, supervised and unsupervised learning, linear and logistical regression, dimensionality reduction, regularization, neural networks, etc. Pre-requisites: Knowledge of probability theory (e.g., ELEG 310), linear algebra (e.g., MATH 351), signals and systems (e.g., ELEG 305), and programming experience, particularly in Python or equivalents.

**ELEG 667-014: SEMINAR
MACHINE LEARNING SYSTEMS**

Focuses on mathematical conceptualization, statistical estimation, computational implementation and optimization. Topics covered- data models, supervised and unsupervised learning, linear and logistical regression, dimensionality reduction, regularization, neural networks, etc. Pre-requisites: Knowledge of probability theory (e.g., ELEG 310), linear algebra (e.g., MATH 351), signals and systems (e.g., ELEG 305), and programming experience, particularly in Python or equivalents.

English

**ENGL 300-010: Introduction to Literary Criticism and Theory
INTRODUCTION TO LITERARY THEORY**

Intrigued by strange-sounding words like "deconstruction," post-modernism, cyborgs, ideology, metaphor, metonymy, queer theory, cyborgs, cli fi, the canon? Over the course of the semester, we will discuss some of the major questions that literary critics wrestle with.

**ENGL 308-010: Reporter's Practicum
REPORTER'S PRACTICUM**

**ENGL 306-010: Topics in Writing
SCI-FI & FANTASY WRITING**

**ENGL 306-011: Topics in Writing
SCREENWRITING**

**ENGL 306-012: Topics in Writing
WRITING THAT PAYS THE RENT**

Develop the know-how, skills, and tools you'll need to earn a living with your writing or be successful as a copywriter, social media manager, etc.

ENGL 308-010: Reporter's Practicum

**ENGL 365-010, 080: Studies in Literary Genres, Types and Movements
BLUE HUMANITIES**

Blue humanities is the recognition of the close relationship between modern culture and our watery environments. This course explores the oceans; city blueprints; fresh and salty streams; vapors, crystals, and waves and their deep effects on literature and our current perspectives.

**ENGL 365-011: Studies in Literary Genres, Types and Movements
BIPOC SCIENCE FICTION**

ENGL 372-010. 080: Studies in Drama**DANGEROUS STAGES/WORLDS**

The stage has often been a place where radical ideas, provocative notions, and wild energy could live and breathe, at least for a few hours. In this course we will read, perform, and discuss a variety of plays,

ENGL 381-010: Women in Literature**WOMEN & LITERATURE OF ILLNESS**

Looks at the history and the politics of mental and physical illnesses, focusing on topics such as cancer, eating disorders, and depression, and their relationship to gender, as expressed in 19th through 21st century British and American texts photographs, and films.

ENGL 462-010: Experiential Learning**WRITING HEALTHCARE FOR ALL**

Develop professional documents for community organizations in Wilmington, DE via UD's Mobile Health Initiative. Scholars will compose usable professional documents like infographics, datasheets, technical instructions, PowerPoints, and flyers and present materials to community partners.

ENGL 480-010, 080: Literary Studies Seminar**HUMAN & NON-HUMAN IN CONTEMPORARY SPECULATIVE FICTIONS**

Speculative fiction encompasses and explores works in which the setting is other than the real world, involving supernatural, futuristic, or other imagined elements. This course explores interactions between humans and nonhumans (dragons, aliens, ecosystems!) Research paper and presentation.

Entrepreneurship**ENTR 467-010: SEMINAR****VENTURE CAPITAL PRACTICUM**

What makes startups attractive to investors? This course takes a hands on approach to learning about venture capital. Students are introduced to a robust due diligence framework and gain experience by using it to assess real potential investments in early stage, technology-based startups.

ENTR 667-010: SEMINAR**VENTURE CAPITAL PRACTICUM**

What makes startups attractive to investors? This course takes a hands on approach to learning about venture capital. Students are introduced to a robust due diligence framework and gain experience by using it to assess real potential investments in early stage, technology-based startups.

Entomology & Wildlife Ecology**ENWC 467-011: SEMINAR****BRIDGING ART AND SCIENCE**

Discovery and exploration of current issues in Insect and Wildlife Ecology through photography and video. Engages in multidisciplinary problem based photographic approaches to communicating a variety of environmental topics discussed by guest lecturers, and covered during field trips.

**ENWC 667-011: SEMINAR
BRIDGING ART AND SCIENCE**

Discovery and exploration of current issues in Insect and Wildlife Ecology through photography and video. Engages in multidisciplinary problem based photographic approaches to communicating a variety of environmental topics discussed by guest lecturers, and covered during field trips.

**ENWC 667-014: SEMINAR
INSECT RESEARCH METHODS**

Sampling techniques for insect survey or biodiversity studies, including field experience, research design, data preparation, analysis and interpretation for publication.

Epidemiology

**EPID 667-015: SEMINAR
INTRODUCTION TO EPIDEMIOLOGIC DATA AND ANALYSIS IN SAS**

Teaches students to apply basic analytical epidemiologic methods using SAS Statistical Software, and to get comfortable working within the SAS environment to import, modify, merge, analyze, store, and document the steps from data collection through final dissemination of results.

Finance

**FINC 467-010, 011: SEMINAR
FINTECH & FINANCE DATA SCIENCE**

Overview of the fintech industry, considering both company stories and strategies. Develop foundation skills in a selection of computing and data science topics that are useful in fintech, including R, Jupyter Notebooks, and machine learning.

French

**FREN 411-010: Great Authors I: 1100-1750
THE PRINCESS DIARIES**

Explores writing by and about French queens and princesses from the Renaissance to the Revolution, including works by Catherine de Medici, Mme de Maintenon (Louis XIV's "secret" wife), Marie Antoinette, Mme de S'vign' and Mme de Lafayette; theater; portraiture, fairy tales and films.

**FREN 611-010: Great Authors I: 1100-1750
THE PRINCESS DIARIES**

Explores writing by and about French queens and princesses from the Renaissance to the Revolution, including works by Catherine de Medici, Mme de Maintenon (Louis XIV's "secret" wife), Marie Antoinette, Mme de S'vign' and Mme de Lafayette; theater; portraiture, fairy tales and films.

German

GRMN 355-010, 080: Special Topics

DIVIDED GERMANY: LIT&CULTURE

The 1989 fall of the Berlin Wall and consequent reunification of East and West Germany served as a turning point in world history and in the lives of individuals with varied attitudes and experiences. Explore the meaning of the Wall in texts and images, and improve your German language skills.

GRMN 455-010, 080: Selected Authors, Works and Themes

LOVE, MONEY & POWER

Considers how the themes of German literature between the late 18th and early 20th centuries have remained relevant in contemporary film. Students will receive an overview of German literature and culture, and improve their German language and close reading skills.

Graduate College

GRCO 667-010: SEMINAR

GRADUATE COMMUNICATION SKILLS

Multilingual and international students will develop, understand, and use the linguistic and rhetorical patterns common to graduate writing and speaking tasks. It is also useful for any other graduate student who needs support in learning the genres, language, and conventions of their field.

History

HIST 268-010, 080: SEMINAR

EUROPEAN NATIONALISM

Examines the evolving forms of nationalism in Europe and their enduring impact on the modern and contemporary world. Students will learn the interpretive arts of history, which includes how to write a term paper.

HIST 268-011, 081: SEMINAR

GLOBAL HISTORY OF RACISM AND SOCIAL EXCLUSION

Introduces students to the institutional practices of social exclusion practiced in much of the world in the twentieth-century.

HIST 268-012: SEMINAR

AMERICAN RADICALISM

Major themes, problems and personalities of American radicalism since the 19th century focusing on on the development of various forms of anti-slavery and anti-capitalists radicalism in the U.S.

HIST 268-013: SEMINAR**DISABILITY IN AMERICAN EXPERIENCE**

Examines how life circumstances and prospects of people with disabilities are shaped and how technologies reveal individual experiences with disability, notions of citizenship, gender, sexuality, identity and accessibility.

HIST 337-010: Topics in American History**SOCIAL VIOLENCE IN AMERICA**

Examines historical roots and social and cultural significance of violence in American life. Students will examine social violence in U.S. history through specific case studies. Participation, in-class discussion, writing and citation exercises, and a 2000-word research essay required.

HIST 337-011: Topics in American History**LATINOS IN THE UNITED STATES**

Explores the background, migration, assimilation and status of six Latino subgroups: Cubans, Puerto Ricans, Dominicans, Mexicans, Central Americans and South Americans. Provides a broad perspective on the background and cultural lives of Latinos in the United States.

HIST 337-012: Topics in American History**AMERICAN ASSASSINS**

Examines the assassinations of leading political and social figures in the United States, and the events, people and circumstances surrounding them.

HIST 337-013: Topics in American History**THE ASIAN AMERICAN EXPERIENCE**

Examines the historical roots of anti-Asian racism through the lens of race relations, gender, immigration, citizenship, and foreign relations. Analyzes stereotyping and discrimination of Asian Americans as well as resistance to racism. Focuses on 1880s through 1970s.

HIST 339-010: Topics in European History**THE LONG ROAD TO WAR: RUSSIA AND UKRAINE FROM KIEVAN RUS' TO THE PRESENT**

Explores the long history of connections and conflicts between Russia and Ukraine from Kievan Rus to the present to help understand why Russia invaded Ukraine in February 2022.

HIST 396-010: Topics in World History**THE TERRIBLE TWENTIETH CENTURY**

Explores the 20th Century tracing the founding of Western and Japanese empires, global conflicts (WWI and WWII) that undermine colonialism and offered opportunities for liberation to colonial peoples and the post-1945 nationalist and communist revolutions.

HIST 400-010, 080: History Capstone Seminar**EUROPE BETWEEN THE WORLD WARS**

Explores the main developments in European history between 1917 to 1939. Focus on ideological influences like fascism and communism and the radical nature of their solutions on European politics. Themes include the Russian Revolution, ascent of Fascism in Italy and Germany and the Spanish Civil War.

HIST 400-011: History Capstone Seminar**DO IT YOURSELF AMERICA**

Explores the relationship between skill and technology from the 18th century to present and how these changes altered what people needed to know to get a job, make a home, or travel from place to place.

HIST 400-012: History Capstone Seminar**DECOLONIZATION**

Explores the causes and circumstances surrounding decolonization, the period after WWII when many territories colonized by European countries in Africa, Asia and elsewhere gained independence. Case studies to include British India, French Algeria and the Belgian Congo.

HIST 680-010: Studies in World History**HISTORY OF CAPITALISM**

Human Development and Family Studies**HDFS 367-010: SEMINAR****INTERNSHIP READINESS & PROFESSIONAL SKILLBUILDING**

Prepares students for the process of searching for and securing an internship for HDFS 334 and HDFS 449. Workplace communication, resume building, and professionalism will also be discussed.

HDFS 667-011: SEMINAR**GRADUATE SEMINAR**

Introduces students to the topics and research areas in the field of Human Development and Family Sciences. Topics include how to create a successful academic trajectory, negotiating work-life issues, and professionalization in the field.

HDFS 867-012: SEMINAR**SHARING LEARNING SCIENCE****HDFS 867-013: SEMINAR****APPROACHES TO RESEARCH**

Fosters students' knowledge of critical qualitative research theories, methodologies, and methodological techniques. A key emphasis is to inspire social-justice oriented and anti-oppressive inquiry in human development, education, and other applied social sciences.

Italian**ITAL 455-010, 080: Selected Authors, Works and Themes****CONTEMPORARY ITALY**

Guides students through contemporary Italian culture and society via politics, art, theater, music, fashion, and cinema. The course provides students with opportunities to enhance their communication skills. Honors students complete an additional presentation and research paper.

ITAL 655-010: Selected Authors, Works and Themes**CONTEMPORARY ITALY**

Guides students through contemporary Italian culture and society via politics, art, theater, music, fashion, and cinema. The course provides students with opportunities to enhance their communication skills. Honors students complete an additional presentation and research paper.

Journalism**JOUR 425-010: Ethics and Issues in Journalism****THE ETHICAL JOURNALIST**

Covering issues such as "fake news" and how journalists handle ethical dilemmas and competing allegiances, this course examines how journalists respond to pressure to sensationalize news (allegiance to shareholders) versus providing the general public with useful but not sensational information.

Kinesiology & Appl Physiology**KAAP 440-011: Topics in Exercise Science****GAIT ANALYSIS APPLICATIONS**

Covers applications of gait analysis in orthopaedic surgical planning, injury rehabilitation, aging, and sport performance. Gait analysis advances scientific knowledge about human movement and can be used to inform clinical decisions.

KAAP 440-050: Topics in Exercise Science**SPORT MEDICINE PHARMACOLOGY**

Understanding of the origin, chemistry, effects and uses of medications commonly used in sports medicine. Topics include pharmacokinetics, indications, contraindications, adverse reactions, management of overdose, phonophoresis, iontophoresis, drugs affecting skeletal muscle, pain and inflammation.

KAAP 640-010: Topics in Physiology**HUMAN CARDIOVASCULAR CONTROL**

Examines neural and hormonal control of the cardiovascular system during stressors such as exercise,

Languages, Literatures and Cultures**LLCU 105-010: MODERN LANG I-ELEMENTARY****ASL AMERICAN SIGN LANGUAGE 1**

Introduction to the basic skills in production & comprehension of American Sign Language. Includes the manual alphabet, numbers, fingerspelling, vocabulary, ASL grammar. Develops conversational ability without using voice/ hear any sounds and culturally appropriate behaviours such as ASL immersion.

LLCU 267-010, 080: SEMINAR**ARABIC CALLIGRAPHY**

Arabic Calligraphy is a traditional artistic practice combining Arabic alphabet, visual representation and design of handwriting styles. Rooted in Arab Islamic culture, it was first used for religious texts, and is now linked to poetry, proverbs, architecture, and modern graphics and design.

LLCU 330-010, 011, 080, 081: Topics: World Literatures and Cultures

VAMPIRES IN FOLKLORE LIT & FLM

Explores the origins and image of the vampire from Slavic and East European myth up to contemporary Western media, tracing its evolution from association with disease to countercultural and civil rights movements. Fulfills Group B requirement. Sections for Second Writing and Honors.

LLCU 330-012, 082: Topics: World Literatures and Cultures

ROMAN DEC CLTR:PAINTING&MOSAIC

In ancient Rome, paintings covered the walls and ceilings of palaces, homes, shops, baths, tombs and shrines. Explores ancient Roman wall paintings and mosaics representing myths, landscapes, rituals, commerce and more. How did the visual world reflect or shape social roles and behaviors?

LLCU 332-010, 080: Topics: Arabic Literature in Translation

CONTEMPORARY ARAB CINEMA

Offers an introduction to cinema in the Arab world, its role in the development of cultural identity and cultural memory. It explores cinematic depictions of major political and cultural issues through screenings and discussion of films from Egypt, Tunisia, Lebanon, Syria and Palestine.

LLCU 380-010, 080: Topics: Japanese Culture in Translation

SPECIAL TOPICS

Examines contemporary Japan by reading a selection of novels, manga, short stories and critical essays by Japanese writers and watching films and anime. The focus is on current Japanese attitudes, customs and beliefs, as well as social issues problematized in art and literature.

LLCU 383-010, 080: Chinese Culture in Translation

Chinese Culture in Translation

Through a study of (post)modern thinkers-- Nietzsche, Deleuze, pre-Socratic thought, Egyptian and Mesopotamian cultures, and ancient Chinese civilization, this course aims to teach students the ancient worldviews of the East and West to enhance students' understanding of postmodernity.

LLCU 420-010, 080: Topics in Italian Literature

TERRORISM IN ITALIAN CINEMA

Examines the representation of terrorism in Italian film covering the tensions from the Civil War of the Italian Resistance during World War II to the so-called "years of lead" ('anni di piombo,' c. 1969-83) and their related ideological terrorisms to the Cold War era.

LLCU 620-010: Topics in Italian Literature

TERRORISM IN ITALIAN CINEMA

Examines the representation of terrorism in Italian film covering the tensions from the Civil War of the Italian Resistance during World War II to the so-called "years of lead" ('anni di piombo,' c. 1969-83) and their related ideological terrorisms to the Cold War era.

Leadership

LEAD 337-050: Topics in Political Communication

POLITICS BY THE NUMBERS

From clicks to ballots, a film series looking at what counts in an election year. A companion course to the National Agenda Speaker Series featuring documentaries and theatrical releases.

Legal Studies

LEST 401-010: Senior Seminar

Should the government be able to control what's inside your head? Culminates the legal studies minor by requiring an independent research project resulting in a term paper. Seminar focuses on a specific substantive issue, provides guidance from professor and chance to share ideas and problems with fellow students. This seminar will explore selected First Amendment conflicts around conscience, speech, religion, and psychoactive drugs. Should the government be able to limit how one chooses to alter one's own consciousness?

Liberal Studies

MALS 617-010: The Arts in Context

TWENTIETH CENTURY ART

Beautiful, surprising, and often challenging, twentieth-century art changed how we see the world. Painting, sculpture, and printmaking will be viewed against the backdrop of great historical events, including two world wars. Biographies of major artists will be emphasized.

MALS 617-011: The Arts in Context

MOZART AND THE ENLIGHTENMENT

Using Nicholas Till's book: Mozart and the Enlightenment: Truth, Virtue, and Beauty in Mozart's Operas, we will explore productions of important Mozart operas. The operas will also be discussed against the backdrop of the Hapsburgs and Masonry in the late eighteenth century.

MALS 667-010: SEMINAR

MOZART AND THE ENLIGHTENMENT

Using Nicholas Till's book: Mozart and the Enlightenment: Truth, Virtue, and Beauty in Mozart's Operas, we will explore productions of important Mozart operas. The operas will also be discussed against the backdrop of the Hapsburgs and Masonry in the late eighteenth century.

Linguistics

LING 831-010: Topics in Syntax

SENTENCE PROCESSING AND EXPERIMENTAL SYNTAX

A seminar focused on exploring (i) how sentences are processed and produced, (ii) the relationship between sentence processing and syntactic theory, and (iii) how research questions in syntax can be operationalized experimentally.

LING 861-010: Topics in Phonology**TOPICS IN PHONETICS AND PHONOLOGY: TONE**

Explore phonology & phonetics of lexical & grammatical tone across language families. Topics: phonological analysis of lexical tone systems, tone sandhi processes, interactions btwn lexical tone, grammatical tone; interactions btwn tone, intonation. Phonetic analysis: speech production & perception.

LING 890-012: Studies in Linguistics**THE LANGUAGE-VISION INTERFACE**

We will explore central questions about the language-vision interface, drawing from classic cognitive-science texts and more recent literature suggesting that visual processing is more sophisticated than is traditionally assumed, and interacts with language in rich ways we are only now discovering.

Management Information Systems**MISY 667-010: SEMINAR****ENTERPRISE RESOURCE PLANNING SYSTEMS**

ERP systems are complex software packages that must be configured to support organizational structures and business processes to efficiently and effectively manage a firm's business processes. This course will give students hands-on experience configuring an SAP's S/4 HANA Enterprise ERP system.

Marine Studies**MAST 367-010, 080: SEMINAR****MARINE ECOLOGY**

Study of the ecology of marine environments. Topics include habitats, subsistence, growth and development, life history, reproduction, dispersal, population regulation, and impact of humans.

MAST 467-022: SEMINAR**EXPLORING OCEAN, ATMOSPHERE, AND CLIMATE DYNAMICS**

Provides an intro to theory & observations of the oceanic & atmospheric circulation affected by Earth rotation & its relation to climate dynamics. Topics: buoyancy-driven flow, meridional heat transport, & wind-driven gyres, which will be explored through accompanying lab experiments.

MAST 467-023: SEMINAR**MARINE POLICY AND RESOURCE MANAGEMENT**

Introduces diverse issues in national and international marine policy. Topics include international ocean governance, fisheries management, biodiversity conservation, coastal risks and climate change, and offshore energy. We discuss current debates, theories, and case studies.

MAST 647-010: Current Topics in Chemical Methods in Oceanography**OCEANOGRAPHY ELECTROCHEMISTRY**

MAST 667-022: SEMINAR**EXPLORING OCEAN, ATMOSPHERE, AND CLIMATE DYNAMICS**

Provides an intro to theory & observations of the oceanic & atmospheric circulation affected by Earth rotation & its relation to climate dynamics. Topics: buoyancy-driven flow, meridional heat transport, & wind-driven gyres, which will be explored through accompanying lab experiments.

MAST 853-010: Oceanography Seminar**ANTHROPOGENIC CO₂, CLIMATE WARMING, AND CARBON DIOXIDE REMOVAL (CDR) TECHNOLOGIES**

Anthropogenic CO₂ emissions have increased atmospheric CO₂ and global temperature. CDR is needed to limit global warming. This class will start with background lectures. Then, each student is asked to evaluate one CDR technology and present to the class and to comment on other presentations.

Materials Science and Engineering**MSEG 667-015: SEMINAR****ADVANCES IN 2D MATERIALS**

Fundamental properties of a wide range of 2D materials, and their potential applications in electronic, and photonic devices. Reviews different techniques used for their synthesis, characterization, and discuss emerging quantum devices with 2D heterostructures.

Mechanical Engineering**MEEG 467-010: SEMINAR****MECHANICS OF ADDITIVE MFG.****MEEG 467-011: SEMINAR****BATTERY MATERIALS & MFG.****MEEG 467-012: SEMINAR****PROTOTYPE TO PRODUCT****MEEG 467-014: SEMINAR****ELECTRICAL ENGRG SENIOR DESIGN****MEEG 667-011: SEMINAR****BATTERY MATERIALS & MFG.****MEEG 867-010: SEMINAR****MULTISCALE MATERIALS**

Multiscale materials abound in many modern technologies: composite materials, photonic and phononic materials, metamaterials, energy conversion systems, and more. This course will present three aspects of multiscale materials: mathematical modeling, numerical methods, and applications.

Music

MUSC 439-010: Practical Studies in World Percussion

BRAZILIAN SAMBA

Focusing on Brazilian Samba, students will explore the music, culture, related ethnic groups, and specifically the percussion of Samba Batucada. Taught through oral tradition, students use their memory to remember songs, rhythms, and information that are presented. Open to all students.

MUSC 639-010: Practical Studies in World Percussion

BRAZILIAN SAMBA

Focusing on Brazilian Samba, students will explore the music, culture, related ethnic groups, and specifically the percussion of Samba Batucada. Taught through oral tradition, students use their memory to remember songs, rhythms, and information that are presented. Open to all students.

MUSC 695-011: Advanced Analysis and Interpretation

SONATA THEORY

Introduces students to the latest ways of thinking about sonata form. Grapple with recent tools and ongoing debates surrounding this familiar form through extensive reading, composition, and analysis; interrogate where it comes from, how it was used, and what meaning it holds.

Neuroscience

NSCI 467-010: SEMINAR

LEARNING, MEMORY AND THE BRAIN

Educates the individual about how neural circuits mediate learning & memory, and standard methods for identifying neural circuits and processes that mediate learning and memory. A brief history of philosophical and scientific interest in learning and memory will be discussed.

Nursing

NURS 411-011: Topics in Healthcare Delivery

CRITICAL CARE NURSING

Current trends in the field of critical care as well as management of common life-threatening illness seen in the intensive care settings will be explored. Psychological, legal, and ethical aspects of critical care nursing will be integrated throughout the course.

NURS 411-012: Topics in Healthcare Delivery

WARRIORS AMONG US: CARE OF MILITARY MEMBERS, VETERANS AND THEIR FAMILY MEMBERS IN CIVILIAN

Assist healthcare students to understand military culture and effects of military service on physical and mental health of Military Members, Veterans, and their family members. There will be many expert guest speakers, videos, panels, lectures and an optional field trip.

NURS 411-194: Topics in Healthcare Delivery

INTERPROFESSIONAL HEALTHCARE INFORMATICS

Introduces students to healthcare informatics and helps them learn to work in inter-professional groups seeking innovative informatics solutions, to solve complex healthcare problems. Faculty from Nursing, Health Sciences and Public Policy encourage entrepreneurial thinking and learning.

NURS 867-10: SEMINAR**ROLE OF THE DOCTORAL SCIENTIST**

Students will share scholarly discourse with PhD-prepared nurses and adopt behaviors needed by scientist for engaging in team science with the local and global scientific community. Students will examine scientific integrity and responsible conduct in biomedical, clinical and translational research.

Philosophy**PHIL 465-010, 080: SENIOR SEMINAR:****RULES OF LAW**

The "Rule of Law," is "often invoked yet seldom defined." To Aristotle it is "government by laws and not by men." There are many proposed "Rules of Law." Which is most defensible, and what are its political consequences? We'll consider also the variety of rules that law and government employ.

Physical Therapy**PHYT 867-010: SEMINAR****CULTURE AND COMMUNICATION IN REHABILITATION RESEARCH**

Elevates students' knowledge and skill in the effective verbal, nonverbal and written communication in their area of rehabilitation research. Build a personalized process focused on becoming a flexible, adaptive, clear, compelling communicator in the service of science.

Physics and Astronomy**PHYS 169-011: Perspectives on Physics and Astronomy****DISCOVERING & DELETING PLANETS****PHYS 467-010: SEMINAR****COMPUTER VISION FOR PHYS SCI**

Introduces students in the physical sciences to the foundations of information extraction from imaging data via the application of CV algorithms to data across numerous fields of physics. Topics include image processing, machine learning, object tracking, and neural networks.

PHYS 667-010: SEMINAR**COMPUTER VISION FOR PHYS SCI**

Introduces students in the physical sciences to the foundations of information extraction from imaging data via the application of CV algorithms to data across numerous fields of physics. Topics include image processing, machine learning, object tracking, and neural networks.

Plant Science**PLSC 800-011: Current Topics in Plant Science****CURRENT CONCEPTS IN PLANT HEALTH****PLSC 865-010: Seminar****PLANT & SOIL INTERFACES**

Political Science

POSC 337-050: Topics in Political Communication

POLITICS BY THE NUMBERS

From clicks to ballots, a film series looking at what counts in an election year. A companion course to the National Agenda Speaker Series featuring documentaries and theatrical releases.

POSC 401-011: Topics in Law and Politics

HUMAN TRAFFICKING

Provides an overview of labor and sex trafficking. Includes a focus on international as well as domestic trafficking. Along with an overview, the course covers the international legal framework and the American federal laws that apply to the crime of human trafficking.

POSC 401-012: Topics in Law and Politics

CRIMINAL PROCEDURE

Provides students with an overview of Constitutional Criminal Procedure as developed through United States Supreme Court case law. Explores criminal due process of law generally and specific provisions such as search and seizure, arrest, right to counsel, bail, etc.

POSC 409-010: TOPICS IN WORLD POLITICS

THE POLITICS OF GLOBALIZATION AND DEVELOPING ECONOMIES

This course introduces students to substantive issues in the politics of globalization and development. Special focus on Western (U.S., EU, World Bank, IMF, etc.) models of economic and political development, global distribution of wealth, and performance of developing economies.

POSC 447-010: National Agenda

NATIONAL AGENDA 2022: POLITICS BY THE NUMBERS

Seminar offered in conjunction with speaker series focused on current policy and political problems facing the United States. When it comes to elections - especially high-stakes elections like the upcoming midterms - the numbers matter.

POSC 499-010, 011, 012: Capstone

CAPSTONE EXP SEMINAR

Focuses on developments in the 2022 American Midterm Elections. As a Capstone Experience, this course is intended to serve as an expression of the totality of a political science and international relations student's growth, development, and learning as an undergraduate.

Psychology

PSYC 467-010: SEMINAR

TOPICS IN ORGANIZATIONAL PSYCHOLOGY

"I-O psychology is a dynamic and growing field that addresses workplace issues at the individual and organizational level." - Society for Industrial and Organizational Psychology (SIOP). We will look at research on topics such as employee selection and evaluation, motivation, leadership, work teams.

**PSYC 867-010: SEMINAR
SOCIAL NEUROSCIENCE OF STATUS**

Advanced level introduction to psychological and neuroscience investigations of social status. Adopting a broad perspective, surveys expanding social psychological and neuroscience literature, exploring how social status shapes various aspects of our lives.

**PSYC 867-014: SEMINAR
CLINICAL SCIENCE**

Seminar offers 1st and 2nd year grad students an introduction to Clinical Science at UD.

Russian

**RUSS 455-010, 080: Selected Authors, Works and Themes
PUSHING LIMITS: NEOREALISM**

Bunin, Gorky, Kuprin and Andreev continue the realist tradition in a crazy modernist art world, but with an often shocking twist.

Spanish

**SPAN 455-010, 080: Selected Authors, Works and Themes
HISPANIC CRIME FICTION**

Examines how detective fiction in the Hispanic world evolved from the British mystery or "enigma" and the North American hard-boiled genre to the crime novel or novela Negra addressing political reality particularly when the state is involved in crime and wrongdoers escape with impunity.

**SPAN 875-010: Seminar: Topics in Spanish Literature
SEMINAR**

Explores Cervantes's masterpiece as a reflection on authority, life and literature, reality and appearance, individual freedom, and moral and literary censorship. We will study Don Quixote and his times, but also the socio-cultural systems that decide which works we should read and why.

Urban Affairs and Public Policy

**UAPP 167-010: SEMINAR
ADVOCACY AND SOCIAL CHANGE**

Introduces students to the people and organizations making social change in the US, including activists, social movements, and nonprofits. Students will learn about identifying a social cause, the ways to advocate for change, and career paths in the nonprofit sector.

**UAPP 337-050: Topics in Political Communication
POLITICS BY THE NUMBERS**

From clicks to ballots, a film series looking at what counts in an election year. A companion course to the National Agenda Speaker Series featuring documentaries and theatrical releases.

Women and Gender Studies

WOMS 260-010, 080: Women: Cultural Representations

HIP-HOP AND FEMINISM

Explore and contest the socio-political aspects of hip-hop's main elements using a feminist lens. This course explores the relationship of hip-hop, gender, race, class, and sexuality through literature, film, music, and new media.

WOMS 330-010, 080: Topics: World Literatures and Cultures

VAMPIRES IN FOLKLORE LIT & FLM

Explores the origins and image of the vampire from Slavic and East European myth up to contemporary Western media, tracing its evolution from association with disease to countercultural and civil rights movements. Fulfills Group B requirement. Sections for Second Writing and Honors.

WOMS 336-010: Feminist Cultural Studies

FASHIONING THE NY WOMAN

Examines "the New York Woman" from the early 20th century to the present as a concept, a visual image, an ideal, and a reality. Course requirements will include daily in-class writing, two short essays, and one longer take-home final essay.

WOMS 363-010, 80: Women in Cross-Cultural Perspective

WOMEN & GIRLHOOD IN ASIA

Using examples from China, Japan, South Asia, and the Middle East, this course examines how the lives of Asian women and girls have been constructed by cultural, historical, and global forces and seeks to understand and challenge the culturally pervasive stereotypes that continue to define them. Honors students watch several pathbreaking Asian films which further illuminate the themes of the class and write critical essays in response.

WOMS 381-010: Women in Literature

WOMEN & LITERATURE OF ILLNESS

Presents work in a variety of media and genres by those who identify as women and 1) who have been healers of the sick; or 2) who have experienced illness themselves; or 3) who have been labeled "diseased" by virtue of their gender.