

## Supplemental Course Descriptions for Fall-2019

Updated July 30, 2019

### ACCT – Accounting

#### **ACCT 267-10 UNDERSTANDING THE ACCOUNTING PROFESSION**

Faculty and real world accounting professionals share the different areas of specialization and career paths within the profession, including emerging issues within these areas. Includes timing and aspects of externships, internships and permanent positions.

### ANTH – Anthropology

#### **ANTH 267-70 PREHISTORIC ARCHEOLOGY AND JAPANESE ETHNICITY**

Explore Japanese from archaeological and anthropological perspectives. Discuss Japanese ethnicity through writings of Meiji and Taisho periods. Explore prehistoric archaeology, current developments of genetic studies, trace Japanese history in migration, religion, society, environment, and food.

#### **ANTH 367-70 PERSONHOOD AND THE SELF -- ANTHROPOLOGICAL PERSPECTIVES**

Explores the notions of personhood and the self cross-culturally. Investigates the concept of 'agency' as a related subject. Includes case studies Africa, Melanesia, and Asia, including several cases from Japan.

### APEC - Applied Economics

#### **APEC 867-10 CONDUCTING APPLIED ECONOMIC RESEARCH**

Guides graduate students through the process of conducting research in applied economics. Required seminars presented by visiting speakers. Develop thesis proposals.

### ART – Art

#### **ART 167-70 CROSS-MEDIA ART STUDIO**

Inter-disciplinary exploration of photograph, video, performance, drawing and painting and all of the evolving forms of new media. Students critically respond to contemporary art through visiting cross-media art exhibits, performances, installations and festivals.

#### **ART 267-70 SEMINAR: SPANISH CONTEMPORARY ART**

Provides an introduction to Spanish contemporary art. Examines the concepts behind the work and the evolution of Spanish art in relation to similar movements in Europe and the United States.

Complimented by visits to relevant exhibitions in Barcelona and talks by professional artists.

#### **ART 267-71 SEMINAR: SPANISH CONTEMPORARY ART: 1970-1990**

Introduction to contemporary Spanish art between the years 1970 and 1990.

#### **ART 367-70 SEMINAR: NEW TENDENCIES IN SPANISH CONTEMPORARY ART**

Introduction to the dissolving lines between the classic contemporary disciplines, and how they are being explored by Spanish contemporary artists. Considers how contemporary art is becoming ever more interdisciplinary, at times confusing and unclassifiable.

#### **ART 467-70 SEMINAR: URBAN INVENTIONS AND ART AS A LANGUAGE**

Focuses on the idea that art and urban interventions can be understood as a language through fundamental elements and analysis of intention of Spanish artist's work. Also considers public art as urban interventions with scheduled visits to various museums and public spaces.

## **ARTH - Art History**

### **ARTH 167-70 HISTORY OF ART I**

Survey of Art and Architecture in the Western tradition from prehistoric times until the end of the Middle Ages. Familiarizes students with the main developments in visual culture during the chosen period, as well as to introduces students to the basic methodology.

### **ARTH 399-10 EGYPT VS NUBIA: LOVE & WARRING**

Explores the paradoxical relationship of Nubians in diverse roles in Ancient Egypt's long history: From exotic dancers, to powerful viziers, to being Pharaohs & Queens; and the reverse dynamic registered in the art and architecture.

### **ARTH 402-10 ART OF THE AFRICAN DIASPORA**

Explores African American art history and the art histories of other African Heritage peoples of the Caribbean, the Central & South Americas, India, & Europe. Contests and explores the usefulness of the idea of diaspora as an art historical tool.

## **ARTH**

### **ARTH 415-10 ART & SCIENCE OF CONNOISSEURSHIP**

Introduction to methods of stylistic analysis, connoisseurship, and technical art history. Includes making attributions in paintings and drawings; understanding condition and materials; discerning copies vs. originals; X-ray, IRR, UV, XRF analysis; field trips and direct study of objects.

### **ARTH 417-10 DUTCH ART ROUGH & SMOOTH**

Art theory and artistic practice, style and expression, tradition and invention, in the age of Rembrandt & Vermeer.

### **ARTH 455-10 SUBJECT TO DISPLAY: FROM HUMAN ZOOS TO REMEMBRANCE & RECONCILIATION**

History of African American art exhibitions and collections from early 20th century, founding of Smithsonian's Anacostia Museum, National Museum of African Art and National Museum of African American History and Culture are placed within larger context of race, institutional building and American history.

### **ARTH 602-10 CONTEMPORARY CURATORIAL PRACTICE IN EASTERN EUROPE, 1989-PRESENT**

Explores various curatorial strategies developed in post-1989 Eastern Europe as the Cold War ended and the region underwent political & cultural change. Special attention to connections between contemporary art, globalization, post-socialism, and neoliberalism. Some sessions meet off-campus.

### **ARTH 617-10 DUTCH ART ROUGH & SMOOTH**

Art theory and artistic practice, style and expression, tradition and invention, in the age of Rembrandt & Vermeer.

### **ARTH 621-10 REALISM & ITS OTHERS IN THE 19TH CENTURY**

Artistic realism considered in relation to countervailing tendencies, with particular attention to French artists in the 1870s and new approaches. Considers artistic, sociopolitical, critical, and cultural context, and pertinent methodological and theoretical approaches.

**ARTH 635-10 HOW NEW YORK STOLE THE IDEA OF AMERICAN ART**

Considers how New York became the center of American art in the 19th century. Explores the institutional development of art academies, clubs, exhibitions, museums, and galleries, from the American Academy of Fine Arts to the American Art-Union & Armory Show. Field trips required.

**ARTH 635-12 LANDSCAPES OF SLAVERY**

Seminar investigates landscapes of slavery from slave ships, to American plantations, to Caribbean sugar mills, to routes to freedom. We will study enslaved people's experiences & ask how museums interpret landscapes. Includes field trip to Virginia. Some course sessions will meet off-site.

**ARTH 655-10 SUBJECT TO DISPLAY: FROM HUMAN ZOOS TO REMEMBRANCE & RECONCILIATION**

History of African American art exhibitions and collections from early 20th century, founding of Smithsonian's Anacostia Museum, National Museum of African Art and National Museum of African American History and Culture are placed within larger context of race, institutional building and American history.

**ARTH 667-13 THE ORIENT ON MAPS: HOW GREEK "GEOGRAPHIA" CAME TO CHINA**

Study visual interpretations of "the Orient" on maps, from Ptolemy's "Geographia" to the Jesuits' maps and visual representations of the world. Explores transmission of designs and ideas that connected Asia and Europe. Research in Special Collections included.

**ARTH 667-14 LANDSCAPES OF SLAVERY**

Investigates landscapes of slavery, from slave ships to American plantations, to Caribbean sugar mills, to routes to freedom. Studies enslaved people's experiences and considers how museums interpret landscapes. Includes field trip to Virginia. Some course sessions will meet off-site.

**BHAN - Behavioral Health & Nutrition**

**BHAN 130-38 AVOIDING THE QUARTER-LIFE CRISIS**

Prepares students for life after graduation. Emphasizes strategies for success and avoiding the pitfalls during the transitional period from college to the professional world. Topics include: the job search process, managing your finances, and maintaining relationships.

**BHAN 367-10 HEALTH COMMUNICATION CAMPAIGNS**

Examines health communication campaigns that promote behavior change at the individual, interpersonal, organizational, and community levels. Explores current media environment where campaigns utilize channels including phones, video games, and television. design and effects.

**BHAN 367-11 MENTAL HEALTH & WELL-BEING**

Addresses common mental health issues and conditions. Examines stress management, self-esteem, depression, bi-polar disorder, anxiety, substance abuse, and disordered eating. Exposes commonly used mental health indices and which mental health professionals to refer.

**BHAN 367-12 FOOD SECURITY ISSUES AND EDUCATION**

Laboratory experience in campus food pantry management and operations with emphasis on education, marketing, advocacy. Explores existing programs addressing food insecurity and disparity, as well as novel and emerging strategies. Includes food safety certification.

**BHAN 467-10 PEER MENTORING (HEALTH BEHAVIOR SCIENCE)**

Opportunity to develop and apply skills in Peer Mentors for students enrolled in BHAN160 Health Behavior Science Seminar: Includes Peer Mentoring experiences applied under BHAN Professional Academic Advisor supervision.

**BHAN 467-11 WORKSITE WELLNESS**

Explore first-hand an orientation to worksite wellbeing and health promotion. Provides hands-on experience and emphasis on skills needed to create healthy, happy, highly productive employees and work settings.

**BINF – Bioinformatics**

**BINF 667-194 APPLIED MACHINE LEARNING**

Introduction to machine learning principles and pragmatics, and discussion of various machine learning techniques/tools and their applications in data science related fields.

**BISC – Biological Sciences**

**BISC 667-10 MAKING SCIENCE MAKE SENSE**

Enables students to communicate scientific information to an audience with weak to no science background. Examines how science issues are explained in popular media. Students learn how to explain their research clearly and concisely through written and verbal means.

**BMEG – Biomechanical Engineering**

**BMEG 467-17 INTERFACING MATERIALS WITH THE HUMAN BODY**

Physiologic constraints of placing materials in the human body. Effects of biologic environment on biomaterials (integration, degradation) and effects of biomaterials on local cells and tissues (inflammatory responses, calcification). How to choose appropriate materials for biomedical applications.

**BMSC - Biomechanics & Movement Science**

**BMSC 667-12 BIOMEDICAL SIGNAL PROCESSING**

Covers time domain and frequency domain methods such as filtering, Fourier analysis, correlation and coherence, discusses how, when and why to apply them, and introduces the mathematical tools upon which these techniques are based.

**BMSC 867-12 SENSORIMOTOR LEARNING**

Explores recent advances within the field of sensorimotor control and learning, with an emphasis on studies combining behavioral and computational approaches. Students will lead discussions of classic and recent literature, and present novel study ideas as a final project.

**BUAD - Business Administration**

**BUAD 367-70 DOING BUSINESS IN CHINA**

Provides an understanding on the peculiarities of doing business in China. Equips students with the practical skills needed to master doing business in the Middle Kingdom, while providing an integrated business perspective on historical, philosophical and economic development.

#### **CGSC – Cognitive Science**

##### **CGSC 867-000 LAB RESEARCH**

prepares students for experimental research in Linguistics. course content includes statistical analysis, how to operate lab equipment, and how to design specific experiments.

##### **CHEM 467-10 COMPUTATIONAL CHEMISTRY THEORY AND APPLICATIONS**

#### **CHEM – Chemistry**

##### **CHEM 467-10 COMPUTATIONAL CHEMISTRY THEORY AND APPLICATIONS**

Fundamental principles and applications of computational chemistry methodologies including quantum, classical and hybrid approaches. Covers theoretical and computational aspects of molecular orbital theory, density functional theory, force fields, and molecular dynamics.

##### **CHEM 667-10 SOLID STATE NMR SPECTROSCOPY**

Introduces the physical principles and routinely used methods of solid state NMR. Half the lectures will be in the classroom, and half at the spectrometer. Covers applications in a wide range of disciplines, including inorganic chemistry, materials science, and biology.

##### **CHEM 667-14 COMPUTATIONAL CHEMISTRY THEORY AND APPLICATIONS**

Fundamental principles and applications of computational chemistry methodologies including quantum, classical and hybrid approaches. Covers theoretical and computational aspects of molecular orbital theory, density functional theory, force fields, and molecular dynamics.

##### **CHEM 667-20 TOXICOLOGY**

Introduces the fundamentals of mammalian toxicology. Presents toxicological concepts within contexts familiar to chemists and to biologists.

#### **CIEG - Civil & Environmental Engineering**

##### **CIEG 467-11 PRESTRESSED CONCRETE DESIGN**

Behavior, analysis and design of prestressed concrete structures. Covers flexure, shear, axial load, bond anchorage design and construction considerations for pretensioned and post-tensioned concrete.

##### **CIEG 467-12 CONCRETE MATERIALS**

Covers fundamentals of cement and concrete, its constituents and sustainability aspect; relates processing with chemistry, microstructure and performance like strength and durability.

##### **CIEG 467-14 MICROBIOLOGY LAB**

Basic microbiology laboratory techniques, and biological analyses important to environmental engineering and water quality. Isolate and identify microbes with activities potentially useful in water treatment technologies.

#### **CISC - Computer Science**

**CISC 467-10 GAME PROTOTYPING**

Theory and practice of game design and development from concept to playable game through prototype iteration using a well-known game platform and a powerful scripting language. Prototype several examples of arcade, shooter, and action-adventure games.

**CISC 467-11 INTRODUCTION TO HUMAN-COMPUTER INTERACTION**

Explores research and theoretical methods for the study, design, implementation and evaluation of effective user interactive systems, including requirements for gathering, survey design, and rapid prototyping. Hands-on group projects supplement theoretical knowledge.

**CISC 489-10 INTRODUCTION TO MULTI-AGENT SYSTEMS AND COMPUTATIONAL GAME THEORY**

Theory and construction of computational agents; distributed cooperation and shared problem-solving; self-interested agents and computational game theory; distributed decision-making, coalition formation, voting, resource allocation, incentive design, negotiation, electronic commerce and security.

**CISC 667-10 COMMUNICATION SKILLS FOR COMPUTER SCIENCE RESEARCHERS**

Mentored experience in writing computer science research papers, proposals, and dissertations through focused writing exercises and critiques. Practice in developing and presenting elevator talks; research posters; conference and thesis defense presentations; and research interview talks.

**CISC 667-11 INTRODUCTION TO HUMAN-COMPUTER INTERACTION**

Explores research and theoretical methods for the study, design, implementation and evaluation of effective user interactive systems, including requirements for gathering, survey design, and rapid prototyping. Hands-on group projects supplement theoretical knowledge.

**CISC 849-10 APPLIED GAME THEORY**

Explore game theory, survey recent research, and identify research challenges and directions.

**CISC 849-11 AUTONOMOUS ROBOT VISION**

Survey of color camera, depth camera (e.g., Kinect), and laser range-finder-based 2-D and 3-D sensing algorithms for mobile robot navigation and interaction. Focus applications will be humanoid robot perception for disaster response, driver-less cars, and trail following.

**CISC 859-10 DISTRIBUTED LEDGER TECHNOLOGY (BLOCKCHAIN)**

Distributed ledger technology (Blockchain) allows participants of a distributed system to agree on a common view of the system and to track its changes in a reliable way. Discusses the agreement techniques -- concepts and protocols -- used to build fault-tolerant distributed systems.

**COMM – Communication****COMM 167-70 MASS MEDIA AND THE FASHION INDUSTRY**

Explores the relationship between mass media and the fashion industry from 19th century Paris to today's new media platforms and globalized communication networks. Address primary forms of conventional fashion media as well as media dialogue and diplomacy.

**COMM 167-71 MEDIA AND DEMOCRACY IN THE DIGITAL AGE**

Examines relationship between the media and democracy with a particular emphasis on the new media technologies and their profound impact on the current, political processes worldwide. Uses French and worldwide cases to understand how media enhances/undermines democratic process.

**COMM 267-70 LANGUAGE AND POWER**

Study the basic tenets connecting language to power; gain resources to argue the pivotal questions and investigate the problematic issues.

**COMM 267-71 VISUAL CULTURE**

Introduces students to visual culture with a focus on photography, film and multimedia. Includes international photography, both historical and contemporary; and how imagery is used to communicate with an audience.

**COMM 337-10 DIRECTION DEMOCRACY FILM SERIES: POWER OF ONE VOICE**

Coordinated with UD's Center for Political Communication's National Agenda Series. The Fall 2019 the theme is 'Direction Democracy'. Includes documentary and scripted films, and guest lectures.

**COMM 418-12 EVOLUTION OF ENTERTAINMENT**

The penny press, movies, radio and TV, and now digitally (YouTube, Netflix, et al) how our media shaped our society and how society shapes what is considered entertainment. Addresses the change in society's mores and the reflective nature of the entertainment we consume.

**COMM 450-11 MEDIA EFFECTS**

Examines history and nature of research on effects of mass media, particularly television, in such areas as attitude change, socialization, role modeling and sex and violence.

**COMM 618-12 EVOLUTION OF ENTERTAINMENT**

The penny press, movies, radio and TV, and now digitally (YouTube, Netflix, et al) how our media shaped our society and how society shapes what is considered entertainment. Addresses the change in society's mores and the reflective nature of the entertainment we consume.

**COMM 667-10 MAKING SCIENCE MAKE SENSE**

Enables students to communicate scientific information to an audience with weak to no science background. Examines how science issues are explained in popular media. Students learn how to explain their research clearly and concisely through written and verbal means.

**COMM 667-11 MEDIA EFFECTS**

Examines history and nature of research on effects of mass media, particularly television, in such areas as attitude change, socialization, role modeling and sex and violence.

**CPEG - Computer Engineering****CPEG 467-10 COMPUTATIONAL AND DATA-INTENSIVE RESEARCH PLATFORMS AND APPLICATIONS**

Introductory course for students conducting computational and data-intensive research in all disciplines, providing an overview of relevant computer systems hardware, software, and applications.

**DANC – Dance****DANC 267-70 TANGO DANCING**

Teaches the basics of tango, specific steps, turns, and figures, and the roles of the lead and follower. Complemented with theory classes presenting the historical and social contexts in which tango developed and its current global phase.

**DISA – Disaster Research**

**DISA 467-12 CRISIS & DISASTERS IN FILM & OTHER MEDIA**

Initially uses portrayals; then evaluates crisis and disaster management in real life. Considers how we can manage complex crisis, what needs to be known about the interaction between people, technology, and the natural environment.

**EAMC - Early American Culture****EAMC 606-10 CITIES ON A HILL: MATERIAL CULTURE IN AMERICA'S COMMUNAL UTOPIAS**

Examines communal utopias that experimented with new ideas of religion, sexuality, economics, craftsmanship, sustainability, society, and culture; study in Winterthur Museum's object and library collections, community fieldwork, and a public humanities practicum.

**ECON – Economics****ECON 367-70 SEMINAR: INTERNATIONAL TRADE**

Examines theoretical analysis of international trade and commercial policy. Considers pure theory of international trade by comparative advantage and gains, from trade in classical and neoclassical models, and explores alternative explanations of trade developments.

**ECON 867-10 HOUSEHOLD FINANCE I**

Covers neoclassical and behavioral models of household consumption, saving, borrowing, and portfolio choice. Topics include intertemporal choice, risk, search, prospect theory, reference dependence, time inconsistency, inattention, bounded rationality, nudges, and heuristics and biases.

**EDUC – Education****EDUC 267-70 EDUCATION SYSTEMS**

Provides a wide-ranging introduction to education systems, with special reference to emerging and existing education in Japan. Emphasis is on examining both a broad range of key areas and participants' own assumptions to provide a basis for developing a foundation for working as a practitioner.

**EDUC 867-10 INTERMEDIATE REGRESSION & ANOVA IN EDUCATION**

Intermediate applied statistics course on linear statistical modeling procedures (regression, ANOVA, ANCOVA) in education research. Topics include model specification and assumptions, post-hoc analyses, interactions, confounding and collinearity, diagnostic and remedial techniques and data visualization.

**EDUC 867-11 EDUCATIONAL DATA MINING (EDM)**

Centered around the development of methods for making discoveries within the unique kinds of data that come from educational settings, and using those methods to better understand students and the settings in which they learn.

**EDUC 867-12 SHARING LEARNING SCIENCE: APPLYING & DISSEMINATING WHAT WE KNOW**

Considers how we can share research data findings with people outside the academy, for the larger good. Students select a topic area, evaluate what is known, and consider novel ways to disseminate.

**EGGG – Engineering****EGGG 367-10 DATA SCIENCE I**

Statistics relevant for data science. How current open source software R is used to analyze statistical problems and treatment of statistical inference intended for data science. Provides a



foundation needed for data science courses. Prerequisite for Data Science II.

## **ELEG - Electrical Engineering**

### **ELEG 467-10 CYBERSECURITY SCHOLARS**

Trains thought leaders in cybersecurity as part of a four-year program. Explores real-world issues in cybersecurity while working with clients and experts.

### **ELEG 467-11 DESIGN AND OPERATION OF RENEWABLE ENERGY MICROGRIDS**

Microgrids provide on-grid and off-grid power. Topics include design of reliable, cost-effective microgrids, integrating photovoltaic and other generation, energy storage, sensors, communications, cybersecurity, and control.

### **ELEG 467-13 RF SYSTEMS ENGINEERING FOR WIRELESS AND MOBILE COMMUNICATIONS**

Presents the design and development of RF Systems for Wireless Networks and Mobile Communications. Considers the widespread interest in 5G cellular networks and the dawn of millimeter wave commercial bands.

### **ELEG 667-10 CONVEX OPTIMIZATION**

Provides a comprehensive coverage of the theoretical foundation and numerical algorithms for convex optimization.

### **ELEG 667-12 FUNDAMENTALS OF ACOUSTIC ENGINEERING**

Cover three topics, 1) Fundamentals of Acoustic Engineering, 2) Signal processing for Acoustic signals, and 3) Innovative applications in acoustics including machine learning. Students must have background in Matlab, differential equations, and calculus.

## **ENGL – English**

### **ENGL 606-10 CITIES ON A HILL: MATERIAL CULTURE IN AMERICA'S COMMUNAL UTOPIAS**

Examines communal utopias that experimented with new ideas of religion, sexuality, economics, craftsmanship, sustainability, society, and culture; study in Winterthur Museum's object and library collections, community fieldwork, and a public humanities practicum.

## **FREN – French**

### **FREN 167-70 BEGINNING FRENCH**

Designed for the student having had no prior contact with the French language. Includes excursions into the city of Paris including, but not limited to libraries, museums, theaters, and bakeries.

### **FREN 167-71 BEGINNING FRENCH CONVERSATION**

Designed for students beginning university-level French language instruction. Offers students a structured learning environment for a directed study of French phonetics and the acquisition of beginner-level, action-based conversations appropriate to the immersion experience.

### **FREN 467-71 INTERNSHIP- MULTICULTURAL WORKPLACE**

Practical Internship field component of 120 hours, and reflective and theoretical seminar designed to strengthen business competencies and ability to work in multicultural context. Covers areas such as job searching and leveraging global and intercultural fluency.

## **GEOG – Geography**

**GEOG 367-10 CLIMATE CHANGE, NATIONAL SECURITY, AND PEACE**

Examines the risks of climate change to national security and world peace as assessed by U.S. gov't., international, and non-gov't. agencies. Explores opportunities for peace through entities which address consequences of climate change. Offers guest lectures, films, and experiential learning.

**GEOG 467-28 CLIMATE CHANGE ADAPTATION POLICY**

Global climate change presents major challenges to people and social-ecological systems around the world. Focuses on the policies and programs we have available to adapt to climate risks. Evaluates a coastal climate adaptation policy and program.

**GEOL – Geology****GEOL 467-11 VOLCANOLOGY**

Reviews the origin of volcanoes, the compositions and geophysical characteristics of their eruptive deposits, and the role of volcanism in the geologic evolution of the Earth's crust and its surface environment.

**HDFS – Human Development & Family Studies****HDFS 667-15 COMMUNITY-BASED PARTICIPATORY RESEARCH**

A powerful tool for integrating knowledge generation and social action to deconstruct social, health, educational and other inequities. Introduces students to the purpose and principals of, theoretical and historical roots of, methods and tools for, and critical issues and debates in CBPR.

**HDFS 867-11 INEQUALITIES, FAMILIES, AND SOCIETY**

Examines theory and empirical research on the relationship between structural inequality and families. Emphasizes the role of institutions and policy in creating, reinforcing, and mitigating inequality based on race, gender, class, disability, and other dimensions.

**HIST – History****HIST 268-10 SEMINAR: VIETNAM CONFLICTS**

Explores the "Vietnam War" in the context of decolonization and revolution in the Vietnamese lands of the former French Indochina, through readings, discussion, music, images and film. Students construct a research project to be presented orally and submitted in writing.

**HIST 268-25 SEMINAR: FASCISM & COMMUNISM IN EUROPE**

Explores the developments that led to the ideologies of fascism, communism and anarchism that captivated the imagination of Europeans during the 1930's; and offered radical solutions to economic, social and political troubles created by WWI and the Great Depression.

**HIST 268-29 SEMINAR: EUROPEAN NATIONALISM**

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

**HIST 268-30 SEMINAR: CREDIT, CRASHES & CON-MEN: CAPITALISM IN THE EARLY 19TH CENTURY AMERICA**

Includes a wide range of primary and scholarly sources to investigate capitalism in the early 19th century U.S. Introduces history majors to basic research, writing and presentation methods.

**HIST 337-10 TOPICS IN AMERICAN HISTORY: CAPITALISM IN AMERICA (1492-PRESENT)**

Offers an overview of the mutual development between America and capitalism, charting the history of capitalism in the U.S. from its origins in colonial outposts to today's precarious position as a leader in the global economy.

**HIST 337-11 TOPICS IN AMERICAN HISTORY: WAR AND AMERICAN SOCIETY**

Explores the relationship between war and American society from the Civil War to the present. Themes include race, gender, memory and home-front debates over conscription, propaganda and civil rights.

**HIST 337-12 TOPICS IN AMERICAN HISTORY: AMERICAN ASSASSINS**

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

**HIST 337-13 TPCS: AMERICAN HISTORY: HISTORIC AMERICAN GARDENS & DESIGNED LANDSCAPES**

Uses art, literature, botany and environmental thought to create a true interdisciplinary course. Studies lavishly landscaped places in detail, including Longwood Gardens. Includes a field trip to see designed landscapes in the Brandywine Valley.

**HIST 396-10 TPCS: WORLD HISTORY: PLANTS, PEOPLES & EMPIRES**

Study of the roles of plants and their derivatives (foodstuffs, dyestuffs, ornamentals, manufactures and magic) in human societies. The use and study of plants through history with forays into science, technology and society, indigenous and environmental studies as well as the histories of medicine and zoology.

**HIST 400-13 HISTORY CAPSTONE SEMINAR: DECOLONIZATION**

Capstone seminar focussing on the period after WWII when many territories colonized by European countries in Africa, Asia and elsewhere gained independence. Emphasis on skills like evaluation of sources, interpretation of evidence and building an argument.

**HIST 400-14 HISTORY CAPSTONE SEMINAR: ENVIRONMENTAL HISTORY**

Guides through researching/writing a thesis, while introducing you to environmental history. Uses written, visual and material sources to produce an original research paper about environmental influences on human endeavors, and how people shaped and thought about the natural world.

**HIST 400-15 HISTORY CAPSTONE SEMINAR: PROBLEMS IN EUROPEAN HISTORY**

Directed reading and writing seminar in European 20th century history. Choose a topic, create a bibliography and produce a paper and class presentation. Assume a mid-level (300 or higher) knowledge of Soviet or European 20th century history.

**HIST 400-16 HISTORY CAPSTONE SEMINAR: ORAL HISTORY AND THE JEWISH EXPERIENCE IN AMERICA**

Conduct reading and oral interviews exploring recent experiences of Jews in America. Includes training in oral history methodology. Readings on significant books on recent Jewish history. Final paper locating the experiences of interviewees in the larger Jewish experience.

**HIST 606-10 CITIES ON A HILL: MATERIAL CULTURE IN AMERICA'S COMMUNAL UTOPIAS**

Examines communal utopias that experimented with new ideas of religion, sexuality, economics, craftsmanship, sustainability, society, and culture; study in Winterthur Museum's object and library collections, community fieldwork, and a public humanities practicum.

#### **HLTH – Health**

##### **HLTH 667-10 I-TEAM**

A hybrid interprofessional education and training program that utilizes online lectures and in-person small groups, to teach and engage health profession students in the science and experience of empathy, emotions and mindfulness.

#### **HOSP – Hospitality**

##### **HOSP 267-70 CULTURAL HERITAGE TOURISM**

Designed to familiarize student with the concept of heritage and tourism in rural societies. Includes a wide range of cultural and natural heritages, and their strategic management plans for developing sustainable tourism.

##### **HOSP 367-70 TOURISM AND GASTRONOMY**

Study the culture and vocabulary of French gastronomy, and discover French regional cuisine as well as the culinary world of Paris. Communicate using both verbal and written French in common real-life situations of the culinary sector, and express opinions about nutrition.

##### **HOSP 467-70 THE HISTORY, CULTURE, AND BUSINESS OF WINE**

Introductory survey of the history, culture, and business of the French wine industry. Gain first-hand knowledge and practical experience in one of Europe's oldest international commercial and gastronomic ventures as well as how wine is made, fermentation process, and structure.

#### **KAAP - Kinesiology & Applied Physiology**

##### **KAAP 440-11 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 667-12 BIOMEDICAL SIGNAL PROCESSING**

Covers time domain and frequency domain methods such as filtering, Fourier analysis, correlation and coherence, discusses how, when and why to apply them, and introduces the mathematical tools upon which these techniques are based.

##### **KAAP 667-13 ADVANCED HUMAN PHYSIOLOGY I**

Designed to provide a scientific foundation for advanced human physiology.

#### **LEAD – Leadership**

##### **LEAD 337-10 DIRECTION DEMOCRACY FILM SERIES: POWER OF ONE VOICE**

Coordinated with UD's Center for Political Communication's National Agenda Series. The Fall 2019 theme is 'Direction Democracy'. Includes documentary and scripted films, and guest lectures.

#### **LLCU - Languages, Literatures & Cultures**

**LLCU 167-70 ELEMENTARY CZECH**

Provides an essential understanding and usage of the Czech language. Focuses on establishing a solid base for the students' effective performance in the language and stimulates students to interact creatively in a new language.

**LLCU 167-71 ELEMENTARY CZECH LANGUAGE AND CULTURE**

Interact in a new language and cultural environment, and develop an approach towards the Czech language and culture. Introduces relevant topics of Czech Studies; Czech culture, history, arts and linguistic legacy.

**MALS - Master of Arts in Liberal Studies****MALS 667-11 CONSISTENCY AND CHANGE IN U.S. FOREIGN POLICY**

Examines U.S. foreign policy, focusing on the period from WWII to the present, including the divergent impulses of focus on commercial and security interests vs democratic and human rights abroad. Explores both areas of consistency, and significant changes in American foreign policy.

**MALS 667-12 CREATING SHAKESPEARE**

Studies Shakespeare's changing reputation over the centuries. Considers how he transformed from a working actor and playwright to the "be-all and the end-all" of the English literary tradition; and what Shakespeare-mania can teach us about how we construct a literary canon.

**MAST - Marine Studies****MAST 467-18 MARINE SCIENCE IN THE MEDIA**

Active learning, where students learn how to analyze both the structure of media narratives in marine science, as well as the data that supports or refutes them. Includes introductory computer programming.

**MAST 647-11 ORGANIC CARBON QUANTIFICATION AND SPECTROSCOPIC CHARACTERIZATION**

Current methods for the quantification of seawater dissolved and particulate organic carbon and for characterizing organic matter composition via absorption, fluorescence, and NMR spectroscopy and mass spectrometry.

**MMSC - Medical & Molecular Sciences****MMSC 267-10 FORENSIC DNA**

Knowledge of the rapidly growing field of forensic DNA testing, including the structure/function of DNA, focus on automated techniques for DNA analysis. Describe interpretation, capabilities/limitations of each assay method. Intro biology recommended.

**MSST - Museum Studies****MSST 606-10 CITIES ON A HILL: MATERIAL CULTURE IN AMERICA'S COMMUNAL UTOPIAS**

Examines communal utopias that experimented with new ideas of religion, sexuality, economics, craftsmanship, sustainability, society, and culture; study in Winterthur Museum's object and library collections, community fieldwork, and a public humanities practicum.

**MUSC – Music**

**MUSC 167-11 MUSIC IN MY DISCIPLINE**

Considers how you experience your place in the world through sound. Multidisciplinary course seeking an understanding of various aspects of musical sound in relation to students' own disciplines. Includes readings, films, other online archival sources, and in-class activities.

**MUSC 267-10 QUEER PERSPECTIVES ON POPULAR MUSIC**

A survey of twentieth-century popular music in the United States from the perspective of lesbian, gay, bisexual, transgendered, and queer performers and listeners, drawing upon the fields of musicology and queer, feminist, and critical race studies.

**NTDT - Nutrition & Dietetics****NTDT 367-10 CULINARY MEDICINE**

Experiential lab experience with practical application/translation of nutrition recommendations into food preparation. Topics include preparation principles/recipe modifications for: therapeutic diets for chronic medical conditions; food allergy, intolerance, strict preferences; food insecurities.

**NTDT 367-11 SOCIAL MEDIA & NUTRITION**

Studies technology designed to enhance the efficiency and accuracy of practice in nutrition professions. Investigations include development, application, and evaluation of emerging technologies related to nutrition and education.

**NTDT 467-12 NUTRITION PEER MENTORING**

Focus on developing skills in academic advising/mentoring for peers. Experiences under the supervision of a nutrition faculty member.

**NTDT 867-11 NUTRITIONAL GENOMICS AND GENETICS**

The effect of nutrients/food constituents on gene expression and the effect of genes on nutrient metabolism.

**PHYS – Physics****PHYS 467-11 DATA SCIENCE FOR SCIENTISTS**

Computational data analysis, application of statistical and machine learning methods in the physical sciences, consideration on epistemology and scientific ethics. Project-based. Highly recommend completion of CISC 106, MATH 205 or 241, PHYS207, familiarity with linear algebra prior to enrollment.

**POSC - Political Science****POSC 267-70 INTRODUCTION TO POLITICS II**

Understand and explain political outcomes, processes and systems through the lenses of main theoretical approaches in comparative politics such as the institutional approach, structural approach, behavioral and cultural approach, rational choice approach.

**POSC 467-10 ATTITUDES, PERSUASION, AND POLITICAL PROPAGANDA**

Provide an introduction to the psychology of attitudes and persuasion, and the political science study of the effectiveness of propaganda. Discusses theories of attitudes and persuasion. Applies those theories to analyze U.S. WWI/WWII propaganda posters, war-time

**POSC 467-11 THE IMPLICIT MIND**

Uncover the implicit mind. Consider daily activities that are at times thoughtless: brushing our teeth, walking to class; and others that require more thought: should I trust this person, should I apply to medical school. Each decision involves many processes, some hidden from us.

## **PSYC – Psychology**

### **PSYC 467-10 ATTITUDES, PERSUASION, AND POLITICAL PROPAGANDA**

Provide an introduction to the psychology of attitudes and persuasion, and the political science study of the effectiveness of propaganda. Discusses theories of attitudes and persuasion. Applies those theories to analyze U.S. WWI/WWII propaganda posters, war-time propaganda films, political cartoons, and campaign ads.

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### **PSYC 867-10 A SOCIAL NEUROSCIENCE APPROACH TO SOCIAL STATUS**

Adopting a broad social neuroscience perspective, surveys expanding social psychological and neuroscience literatures, exploring how social status shapes various aspects of our lives. Covers a diversity of focuses, status operationalizations, and methodologies.

## **SOCI – Sociology**

### **SOCI 467-12 CRISIS & DISASTERS IN FILM & OTHER MEDIA**

Initially uses portrayals; then evaluates crisis and disaster management in real life. Considers how we can manage complex crisis, what needs to be known about the interaction between people, technology, and the natural environment.

## **SPAN – Spanish**

### **SPAN 267-72 ORAL EXPRESSION ELECTIVE**

Strengthens skills in grammar and vocabulary in preparation for advanced courses. Includes oral exposes, discussion of articles and videos, textual analysis and compositions.

### **SPAN 467-70 SEMINAR: ENGLISH-SPANISH TRANSLATION**

New approaches to language learning that view the activities of translation and interpreting as a tool for the development of communicative ability and mediation skills. Content and texts will be related to different, real situations of communication.

### **SPAN 467-71 SEMINAR: APPLIED LINGUISTICS IN TEACHING SPANISH**

The study of language and principles of Spanish linguistics for Spanish educators.

### **SPAN 367-70 GRAMMAR AND ORAL COMMUNICATION**

Strengthens skills in grammar and vocabulary in preparation for advanced courses. Includes oral exposes, discussion of articles and videos, textual analysis and compositions.

### **SPAN 367-71 WRITTEN EXPRESSION ELECTIVE**

Study and practice of selected problems of written and oral Spanish syntax and vocabulary as well as textual analysis.

### **SPAN 467-72 TEACHING SPANISH IN BILINGUAL SCHOOLS**

Familiarizes students with the basic questions related to bilingual education for which we address two main aspects: What is bilingualism; and Distinct models of bilingual education  
Taught in Spanish.

**SPAN 467-74 SEMINAR: SPANISH GRAMMAR (SUPERIOR LEVEL)**

Includes the main points of those remaining difficulties which a student may encounter in the latter part of an advanced learning phase, and the best way to solve them, within a pragmatic tone.

**SPAN 467-75 SEMINAR: SPEAKING AND WRITING SKILLS 7 & 8**

Supports fundamental linguistics in areas of difficulties the student may have at this level. Enables students to understand and express self in a variety of situations which may be unfamiliar, and requires exchanging informational and personal opinions using complex linguistic structures.

**SPPA - School of Public Policy & Administration**

**SPPA 467-10 INSTITUTIONS AND LEADERSHIP IN HEALTHCARE**

Study Leadership at macro level. Understand how different institutions/orgs demonstrate leadership on issues important to them. Focus on exploration of culture (societal/industry) and scientific inquiry on leadership, mostly healthcare. Look past an individual and how large organizations exhibit meaningful leadership

**STAT – Statistics**

**STAT 475 ENVIRONMENTAL STATISTICS**

Statistical methods for analyzing environmental data. Relevant probability and sampling theory are introduced, as well as procedures for summarizing, modeling and estimating and making inferences from environmental data. Uses a Computer-based statistical package.

**THEA – Theatre**

**THEA 267-10 MAKEUP FOR STAGE**

Students learn how to do professional makeup for the stage.

**THEA 367-10 COSPLAY DESIGN & FABRICATION**

Familiarizes students with the materials and techniques commonly used to create props and wearables for cosplay applications. Focuses on creating and executing original designs.

**UAPP - Urban Affairs & Public Policy**

**UAPP 337-10 DIRECTION DEMOCRACY FILM SERIES: POWER OF ONE VOICE**

Coordinated with UD's Center for Political Communication's National Agenda Series. The Fall 2019 the theme is 'Direction Democracy'. Includes documentary and scripted films, and guest lectures.

**UAPP 730-10 ADMINISTRATIVE EMPLOYMENT LAW**

familiarizes non-lawyers with some of the core legal issues that leaders in public and private organizations are likely to address including administration and employment.