

Supplemental Course Descriptions for Fall-2017

Updated June 26, 2017

ACCT - Accounting

ACCT 467-10 INTERNAL AUDITING

Covers internal audit from a broad perspective. Considers its important role in today's companies. Includes Governance, Ethics, Business Processes, Risk Assessments, Controls, and Information Technology.

ACCT 467-11 LEGAL ISSUES OF TRUST & FIDUCIARY ENTITIES

Acquaints students with certain critical issues and responsibilities confronting professionals engaged in trust administration. Examines the different types of trust arrangements and their creation, administration, modification, and termination.

ACCT 467-12 BIG DATA TECHNOLOGY

Exposes students to the different phases of big data projects: discovery, collection, enrichment, analysis, and decision making. Students learn how to actually implement Big Data solutions.

AFRA – Africana Studies

AFRA 205-11 AFRICAN DIASPORA EXPERIENCES

Follows the geography and history of dispersed African peoples from their motherland to all parts of the world and reveals the cultural, social, political and economic development of peoples of African descent worldwide.

AFRA 367-10 PHILOSOPHY OF HIP HOP

Considers whether hip-hop philosophy challenges the status quo, or perpetuates it. Examines the philosophy of hip-hop by looking at its ontology, epistemology, and ethics.

AFRA 467-12 CURATING HIDDEN COLLECTIONS & THE BLACK ARCHIVE

Research and digital curation of a recently rediscovered collection of photographs from the Baltimore region. Includes study of early African American portrait photography and an introduction to archival and theoretical challenges in making this collection and others like it available to the public.

AFRA 667-11 RACE, EQUITY, AND EDUCATION: DIALECTICS BETWEEN TEXTS AND COMMUNITIES IN WILMINGTON, DELAWARE

Confronts the complex history of educational texts and spaces in Wilmington, Delaware; considers Wilmington as a lens through which to examine issues of race and equity in education; and to work alongside Wilmingtonians to use texts to increase racial educational equity.

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Research and digital curation of a recently rediscovered collection of photographs from the Baltimore region. Includes study of early African American portrait photography and an introduction to archival and theoretical challenges in making this collection and others like it available to the public.

ANFS - Animal & Food Science**ANFS 467-18 APPLIED GENOMICS**

Covers applications that harness the power of genome science to solve problems in medicine agriculture and the environment. Gain an understanding of the connection between fundamental research in genetics and its impact on society.

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

Designed to explore questions from archaeological and anthropological perspectives. Discusses Japanese ethnicity through early writings Japanese ethnicity in Meiji and Taisho periods and trace Japanese history in the areas of immigration, religion, society, environment, and food.

ARSC - Arts & Sciences**ARSC 167-10 TRANSFER STUDENT TRANSITION**

Designed to support a successful transition of AAP students to the main campus. Includes on-campus resources, connecting with fellow AAP students, and setting goals for junior and senior years.

ART - Art**ART 367-10 EXPLORING PERSONAL NARRATIVE THROUGH MIXED MEDIA DRAWING, PAINTING COLLAGE AND MONOPRINTING.**

Students create a series thematic projects utilizing their own personal history as a resource pool and departure point for image making. Introduces a variety of formats, mixed media techniques, tools and materials. Projects are be 2-dimensional. Prereq: one of the follow: ART231, ART235, ART133.

ART 467-10 EXPLORING PERSONAL NARRATIVE THROUGH MIXED MEDIA DRAWING, PAINTING, COLLAGE & MONOPRINTING

Create a series thematic project, utilizing your own personal history as a resource pool and departure point for image making. Introduces a variety of formats, mixed media techniques, tools and materials. Projects are 2-dimensional.

ARTH - Art History**ARTH 167-70 HISTORY OF ART**

Survey of Art and Architecture in the Western tradition from prehistoric times until the end of the Middle Ages. Includes the main developments in visual culture during the chosen period. Introduces students to the basic methodology of art-historical studies.

ARTH 199-10 THE AGE OF MICHELANGELO

Explores the art & life of one of the greatest artists of all times: Michelangelo Buonarroti. Examines masterpieces such as David & the Sistine Chapel ceiling paintings, but also the works of predecessors, contemporaries & followers: Donatello, Leonardo da Vinci, & Raphael, among others.

ARTH 303-10 ART AND RELIGION IN THE IBERIAN WORLD

Focuses on religious monuments and artifacts created in the Iberian world c. 1492-1800, paying particular attention to the confluence of European, Islamic, African and Native American traditions in Spain, Portugal, and the Americas.

ARTH 417-10 INVENTION IN THE AGE OF VERMEER

An examination of artistic rivalry as spur to innovation and invention in Dutch scenes of daily life. Coincides with major exhibitions of high-life genre paintings by Vermeer and his contemporaries.

ARTH 435-10 FOOL THE EYE: FAKES IN AMERICA

The art and science of deception in American culture, 18c to the present. Includes trompe l'oeil, counterfeiting, faux, imitation, orignty, authenticity, the art trade; discerning fakes using connoisseurship and conservation. Field trips to Winterthur's Treasures on Trial exhibition.

ARTH 616-10 THE FOLLOWERS OF CARAVAGGIO

The International Caravaggesque movement from Manfredi, Orazio, Valentin in Rome, Artemisia in Florence, Ribera in Naples, to Terbrugghen in Utrecht and la Tour in Lorraine. Focus on attribution, iconography, art market, technical studies, narrative, concepts of naturalism, reception/criticism.

ARTH 617-10 INVENTION IN THE AGE OF VERMEER

An examination of artistic rivalry as spur to innovation and invention in Dutch scenes of daily life. Coincides with major exhibitions of high-life genre paintings by Vermeer and his contemporaries.

ARTH 667-11 CHRONOLOGY, ASIA, AND EUROPE

Considers how "Asia" came to exist in relation to the crafting of "Europe" in historical studies. Acquire both breadth & depth in this seminar on historical methodology. Existing knowledge is not required, but passion a must!

BHAN - Behavioral Health & Nutrition**BHAN 267-10 INDIVIDUAL HEALTH ASSESSMENT**

Theoretical background related to specific health risk appraisal tools, the meaning of the results and an opportunity to develop skills necessary to conduct non-invasive health appraisals including heart rate, blood pressure, body composition, and cardiovascular and musculoskeletal fitness.

BHAN 267-13 MINDFULNESS FOR INNOVATION, CREATIVITY AND ENTREPRENEURSHIP (MICE)

Introduces practices to help cultivate focus, relaxation, compassion, emotional intelligence and performance. Search inside yourself, by engaging in mindfulness practices to help improve your capacity for problem solving, leadership, stress management and resilience.

BHAN 367-10 MENTAL HEALTH AND WELL-BEING

Addresses common mental health issues and conditions. Examines stress management, self-esteem, depression, bi-polar disorder, anxiety, substance abuse, and disordered eating. Includes commonly used mental health indices and considers to whom people should be referred.

BMEG – Biomechanical Engineering

BMEG 467-10 ATTACHMENTS IN BIOLOGY

Facilitate an understanding of how dissimilar materials integrate and attach in biological constructs, both naturally and artificially.

BMEG 467-11 BIOMECHANTRONICS

Methods for the design and the control of electromechanical devices that interact physically with humans, to improve biomechanical performance. Includes technologies for sensing, actuation, fundamentals of analog and digital control, methods for analysis of biological signals. Recommended Prereqs: BMEG310/MEEG111, BMEG311/MEEG211, ELEG305/MEEG311.

BMEG 467-12 MAGNETIC RESONANCE IMAGING

Fundamental physical principles of magnetic resonance imaging (MRI) governing image formation and contrast mechanisms, including functional MRI and diffusion weighted imaging, and their applications.

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Fundamental physical principles of magnetic resonance imaging (MRI) governing image formation and contrast mechanisms, including functional MRI and diffusion weighted imaging, and their applications.

CHEM - Chemistry

CHEM 830-10 CHEMISTRY DRUG DISCOVERY AND DEVELOPMENT

Explores principles of the modern drug discovery process from target identification through late stage drug development for the advanced chemistry graduate student. Lectures highlight the fundamental tools used and roles played by chemists throughout the drug development process.

CIEG - Civil & Environmental Engineering

CIEG 467-10 CONSTRUCTION MEANS AND METHODS

Introduces basic and advanced construction equipment and methods used in commercial and heavy construction. Topics include equipment spreads for site-preparation and earthwork; engineering economics for equipment decision making; and sustainable methods for construction operations.

CIEG 467-12 CONCRETE MATERIALS

Through lecture and student participation during in-class discussion (active learning); covers fundamentals of cement and concrete, its constituents and sustainability aspect; relates processing with chemistry, microstructure and performance like strength and durability.

CIEG 667-10 APPLIED OPERATIONS RESEARCH

Optimization principles and techniques including linear/non-linear programming, network flow, multi-objective decision making, decision analysis, queueing, game theory. Modeling/solving real-world problems using commonly available software tools Excel Solver and IBM ILOG CPLEX Optimization Studio.

CIEG 667-11 TRANSPORTATION SUSTAINABILITY

Transportation sustainability from engineering, planning, policy instructors. Sustainability understood and enhanced for a wide range of transportation topics using key tools, models and methods. Best practices. Develop familiarity and facility with practices across disciplines.

CIEG 667-12 CONCRETE MATERIALS

Through lecture and student participation during in-class discussion (active learning); covers fundamentals of cement and concrete, its constituents and sustainability aspect; relates processing with chemistry, microstructure and performance like strength and durability.

CIEG 667-13 LIFE-CYCLE PROJECT ENGINEERING FOR RAIL & TRANSIT

Provides an overview of project management and construction engineering skills required for rail and transit operations. Includes effective management strategies, cost estimation and cost control, planning and scheduling, value engineering, condition assessment and infrastructure asset management.

CIEG 867-10 BIOENGINEERING AND MOLECULAR GENETICS

Studies the mechanisms that control gene expression and protein activity, and design genetic modules for biosensors, genomic screening, or activity under specific conditions.

CISC - Computer & Information Sciences

CISC 459-10 THE POWER OF NETWORKS

Introduces six fundamental principles of networking that connect our lives. Considers examples such as; How Google orders search results; Why Amazon, Netflix and YouTube use different rating and recommendation methods; Why WiFi is faster at home than at Starbucks. And more!

CISC 467-10 PHYSICAL COMPUTING & E-TEXTILES

Physical computing involves creating interactive objects that can sense and respond to environmental conditions. Focuses on creating such objects to solve a variety of real-world problems within a collaborative, group-based structure.

CISC 467-11 EMBEDDED SYSTEMS

Considers most common computers today are embedded in devices, such as modern toasters, cooking pots and cars, that react to their environments. They control motors, detect and measure light; temperature; sound; and heat. Studies how to make new real-time systems such as smart devices and toys.

CISC 467-12 VIP: CLOUD CRYPTO

VIP extends the academic design experience beyond a single semester, with students participating up to 3 yrs. It provides time and context to learn and practice professional skills, to make substantial contributions, and experience different roles on large multidisciplinary design/discovery teams.

CISC 467-13 VIP: HIGH-PERFORM COMPUTING

VIP extends the academic design experience beyond a single semester, with students participating up to 3 yrs. It provides time and context to learn and practice professional skills, to make substantial contributions, and experience different roles on large multidisciplinary design/discovery teams.

CISC 659-10 THE POWER OF NETWORKS

Introduces six fundamental principles of networking that connect our lives. Considers examples such as; How Google orders search results; Why Amazon, Netflix and YouTube use different rating and recommendation methods; Why WiFi is faster at home than at Starbucks. And more!

CISC 879-10 TEXT ANALYSIS FOR SOFTWARE ENGINEERING

Explores text retrieval and natural language analysis techniques to analyze software artifacts and solve software engineering problems. Examines text-based software engineering tools that help developers develop, understand, and maintain large software systems.

CISC 879-11 TOPICS IN ADVANCED ARCHITECTURE & SOFTWARE SYSTEMS: TECHNOLOGY START-UPS

Learn how to identify/evaluate opportunities for creating/joining a technology business, providing practical/proven techniques for transforming ideas into technology products/services that create value for others. Includes outside-of-class interviews with potential clients. Addresses failure, too.

CISC 879-12 TOPICS IN ADVANCED ARCHITECTURE & SOFTWARE SYSTEMS: DATA ANALYTICS AND FINANCE

This course introduces clustering and classification methods of large datasets with an emphasis on finance data. In-class activities include hands-on experience in deploying, programming, and executing data analytics with Spark. Python programming expertise is required.

CISC 889-10 SIMULATION & MODELING OF BIOINFORMATIC SYSTEMS

Concepts, techniques, and tools for modeling and simulation of biological systems. Areas include: gene regulation; signal transduction and metabolism; Bayesian networks; Monte Carlo and Gibbs sampling; and optimization.

COMM - Communications

COMM 200-10 ENVIRONMENTAL COMMUNICATION

Explores environmental communication content, techniques, and effectiveness thru lectures, workshops, discussions, and digital media. Analyzes persuasive messages from governments, corporations, scientists, politicians, advocates, activists, and private individuals.

COMM 267-70 VISUAL CULTURE

Introduces visual culture with a focus on photography film and multimedia. Special emphasis on how visual images are constructed; how to identify and understand the visual functions of each element; and the effect and impact on the viewer.

COMM 267-71 LANGUAGE AND POWER

Comprehend the basic tenets connecting language to power. Gain resources to argue the pivotal questions, and to investigate the problematic issues.

COMM 337-50 UNDERSTANDING A DIVIDED NATION

Examines the various issues that divide our nation including gender, class, race, income and geography and the impact a divided nation has on the political landscape and society.

COMM 367-10 MOBILE NEWS REPORTING

Teaches reporting skills using smartphones. Includes how to shoot and edit news stories for websites and social media.

COMM 418-10 BROADCAST PROGRAMING

Examines the principles and strategies of programming for broadcasting and cable. Includes audience feedback, network, local programming, syndication , and specialized programming, with an analysis of TV ratings. Reviews financial aspects of buying syndicated packages.

COMM 440-10 COMMUNICATION FOR EFFECTIVE LEADERSHIP

Focuses on theories of leadership, as well as the emotional, behavioral, and communicative tools that allow individuals in leadership positions to better engage team members, defuse confrontations, and motivate others toward their best efforts.

COMM 442-10 RESEARCH: GROUP COMMUNICATION

Studies theory and research about communication in small decision-making groups, have a relevant research experience, and learn some practical methods for conducting a group decision-making meeting.

COMM 447-10 NATIONAL AGENDA 2017, AS WE STAND / DIVIDED

Seventh annual National Agenda, explores the divides that exist in the United States, including gender, class, race, income, & geography. Six required events feature top speakers from across the country to address these important issues & how we communicate about them in today's political landscape.

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

Learn the basics of tango and the roles of the lead and follower. Classes is complemented with theory classes presenting the historical and social contexts in which tango developed: its origins as a low life dance in the late 19th century; the Golden Age and and its current global phase.

DISA - Disability Studies**DISA 667-12 NATURAL HAZARDS**

Provides an understanding of the physical processes and effects of natural hazards with a focus on aspects that are critical to the study of disasters. Explores processes, measures, and impacts of hazards such as earthquakes, tornadoes, tsunamis, hurricanes, floods, droughts and landslide to identif

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 INTERNATIONAL TRADE

Examines theoretical analysis of international trade and commercial policy. Studies the pure theory of international trade as exemplified by comparative advantage and gains from trade in the classical and neoclassical models, and explores alternative explanations of trade and development.

ECON 867-10 BEHAVIORAL ECONOMICS

Studies how reference dependence, overoptimism, present bias, bounded rationality, and salience affect individual decision making, along with implications for equilibrium and public policy in markets for consumer goods, labor and financial products. Prereq: ECON811, ECON823.

EDUC - Education

EDUC 267-70 EDUCATION SYSTEMS

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

EDUC 667-10 RANDOMIZED CONTROLLED TRIALS FOR EVALUATING THE IMPACTS OF EDUCATION INTERVENTIONS

This graduate-level course focuses on modern techniques for randomized experiments in education settings (e.g., classrooms, schools, and/or districts) and covers key issues for experimental research subjected to the standards set by the US Department of Education's What Works Clearinghouse.

EDUC 667-11 RACE, EQUITY, AND EDUCATION: DIALECTICS BETWEEN TEXTS AND COMMUNITIES IN WILMINGTON, DELAWARE

Confronts the complex history of educational texts and spaces in Wilmington, Delaware; considers Wilmington as a lens through which to examine issues of race and equity in education; and to work alongside Wilmingtonians to use texts to increase racial educational equity.

ELEG - Electrical Engineering

ELEG 467-10 VIP: GRID INTEGRATED VEHICLES

Identify electric vehicles based on their unique charging characteristics; develop open source software that can be deployed by all electric vehicle chargers; collect data and validate results using our university fleet of electric vehicles and charging stations.

ELEG 467-11 VIP: E-TEXTILES

Involves electronic material design such as functional inks for realizing conductive, resistive and capacitive elements using additive manufacturing; Electronic design of integrated textile based biosensors; Seamless integration of electronic components. Go to <http://vip.udel.edu/e-textiles>

ELEG 467-12 VIP: CLOUD CRYPTO

Working actively on ATM security using biometrics, Block chain voting systems, Penetration Testing, Secure Software Design, and Fully Homomorphic Encryption.

ELEG 467-13 VIP: HIGH-PERFORM COMPUTING

Learning and using directives for parallel platforms; Migrating legacy code to GPUs and co-processors using high-level parallel programming models; Parallelizing irregular algorithms on massively parallel processors; Exploring Repeatability and Reproducibility issues.

ELEG 467-14 VIP: ARTGINEERING

Research includes Embedded control systems, developing open source control software and hardware, studying public interaction with robotics, advancing hands on education through exhibition quality system design and development.

ELEG 467-15 SEMICONDUCTOR DEVICE DESIGN & FABRICATION II

Design and fabrication of advanced electronic devices, including heterojunction bipolar transistors, high electron mobility transistors, metal oxide semiconductor field effect transistors. Students learn total procedure: from design, to transistor sizing and mask design, and device fabrication.

ELEG 467-16 VIP: DRONES

Key Elements include Image Processing, Sensor Fusion, Control Systems, Volume Reconstruction, Object Detection in Images, Adaptive Systems and Machine Learning. To learn more, go to <http://vip.udel.edu/drone> .

ELEG 467-17 VIP: SCOOTERSV2.0

Goals: A self-driving mobility scooter for the elderly and the infirm. Key elements are Electronic sensors, computer vision, and machine learning. To learn more, go to <http://vip.udel.edu/scooterv2>

ELEG 467-18 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 667-10 RADAR SIGNAL PROCESSING

Focused on digital signal processing of linear, time-invariant radar systems. Covers fundamentals of linear systems, filtering, sampling, and both conventional and non-conventional Fourier transform techniques as they apply to radar signal processing. Uses MATLAB.

ELEG 667-15 SEMICONDUCTOR DEVICE DESIGN & FABRICATION II

Design and fabrication of advanced electronic devices, including heterojunction bipolar transistors, high electron mobility transistors, metal oxide semiconductor field effect transistors. Students learn total procedure: from design, to transistor sizing and mask design, and device fabrication.

ENEP - Environment Education & Policy

ENEP 667-11 ENVIRONMENTAL CONFLICT RESOLUTION

Explores the causes of conflicts involving environmental concerns, without presuming that environmental disputes are necessarily a cause of conflict -- indeed they may be a part of the solution to wider regional conflicts.

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.

ENGL 667-11 RACE, EQUITY, AND EDUCATION: DIALECTICS BETWEEN TEXTS AND COMMUNITIES IN WILMINGTON, DELAWARE

Confronts the complex history of educational texts and spaces in Wilmington, Delaware; considers Wilmington as a lens through which to examine issues of race and equity in education; and to work alongside Wilmingtonians to use texts to increase racial educational equity.

ENTR - Entrepreneurship**ENTR 267-13 MINDFULNESS FOR INNOVATION, CREATIVITY AND ENTREPRENEURSHIP (MICE)**

Introduces practices to help cultivate focus, relaxation, compassion, emotional intelligence and performance. Search inside yourself, by engaging in mindfulness practices to help improve your capacity for problem solving, leadership, stress management and resilience.

ENTR 467-12 INNOVATION & INTRAPRENEURSHIP

Takes students through the components of an innovation process within an existing company. Includes the art of collaborative decision making; how to create value from new ideas; how to influence team members; and how to evaluate projects so that the maximum value can be created.

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ENWC - Entomology & Wildlife Ecology**ENWC 867-10 INTERDISCIPLINARY EARTH OBSERVATION SCIENCE FOR SOCIETY AND SUSTAINABILITY (EOS3)**

Learn about opportunities and challenges for pursuing interdisciplinary research, characterize grand societal challenges of connecting Big Data generated through Earth Observation Science to sustainability, and integrate disciplinary approaches to address sustainability problems.

ENWC 867-11 EARTH OBSERVATION SCIENCE FOR SOCIETY AND SUSTAINABILITY DATA ANALYTICS

Introduces to various open-source data tools for acquiring, managing, and analyzing large public Earth Observation Science datasets. Includes interdisciplinary teams to fuse disparate data and conduct analyses that meld ideas from natural and social science disciplines.

FASH - Fashion & Apparel Studies**FASH 467-10 E-TEXTILES AND SMART WEARABLES**

Fashion students and Computer Science students develop a wearable garment or textile together by learning about and applying design thinking. Uses Arduino, open-source physical computing platform to design for the human body.

FREN - French

FREN 367-70 FRENCH HISTORY THROUGH CINEMA

Studies the history of France from Charles VII to Charles de Gaulle through cinematographic works by French filmmakers. Compares film depictions with historical reality. Questions the notion of "historical truth" in works of fiction.

FREN 367-71 PROFESSIONAL COMMUNICATION

Communication in French in a professional environment, with particular focus on how to carry out common professional written tasks, such as writing emails, and oral tasks such as public speaking.

FREN 367-73 STUDIES IN FRENCH CULTURE: FRENCH PAINTING FROM NEOCLASSICISM TO FAUVISM

Study of the evolution of French painting in the 18th and 19th centuries, from neoclassicism to fauvism, by means of methodical analysis of major works, individual student presentations, and museum visits. Emphasizes oral exchange about the course material.

FREN 367-74 PARIS THROUGH THE PHOTOGRAPHER'S LENS

Built around photographs that illustrate a theme or the work of a photographer. Discovers Paris from different perspectives through the works of great photographers. Students learn to describe, analyze, write, and exchange ideas about the photos and photographers.

FREN 367-75 FOCUS ON THE "FRENCH TOUCH" - FRENCH AESTHETIC AND THEMES IN FILM

Explores film considered "typically" French. Covers the beginning of the Twentieth century to a 100 years later at a time when the Internet provides access to thousands of movies from all cultures.

FREN 367-76 FRENCH SOCIETY IN THE NEWS

Discover different aspects of French society with reports from the French TV news.

FREN 467-71 FRENCH SOCIETY - ADMINISTRATION AND ORGANIZATION

Discover how life in France is organized through the major themes of society (history, daily life, current issues) and political institutions, for example by visiting key locations in operation in the country (the Court of Justice).

FSAN - Financial Services Analytics

FSAN 850-10 DATA SCIENCE

The principled extraction of actionable knowledge from data to support decision making. Studies fundamental data science methods and theories, as well as their applications to support decision making in a wide range of areas.

GEOG - Geography

GEOG 473-50 WEB GIS

Teaches how research and various geographic content can be published in a web environment and shared with various stakeholders. Provides a fundamental understanding of creating and designing web maps and web apps using various approaches and platforms.

GEOG 667-11 ENVIRONMENTAL CONFLICT RESOLUTION

Explores the causes of conflicts involving environmental concerns, without presuming that environmental disputes are necessarily a cause of conflict -- indeed they may be a part of the solution to wider regional conflicts.

GEOG 667-12 NATURAL HAZARDS

Provides an understanding of the physical processes and effects of natural hazards with a focus on aspects that are critical to the study of disasters. Explores processes, measures, and impacts of hazards such as earthquakes, tornadoes, tsunamis, hurricanes, floods, droughts and landslides to identify

GEOG 673-50 WEB GIS

Teaches how research and various geographic content can be published in a web environment and shared with various stakeholders. Provides a fundamental understanding of creating and designing web maps and web apps using various approaches and platforms.

GEOL - Geology

GEOL 467-10 VOLCANOLOGY

The origin of volcanoes, the compositions and physical characteristics of their eruptive deposits, their hazards and the role of volcanism in the geologic evolution of Earth's crust and its surface environment. Global impact of large eruptions and volcanic activity in general will also be examined.

GEOL 467-11 TOPICS IN GEOMICROBIOLOGY

How microorganisms drive geological processes in modern environments, and the role of microbial life on ancient Earth. Discussion of the recent and classic literature on topics such as microfossils, biomarkers, biomineralization, astrobiology, extreme environments, and redox history of Earth.

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GEOL 667-13 ADVANCED TOPICS IN HYDROLOGY

Explores topics in Hydrological Sciences at advanced level. Students will examine three areas of active research. Course taught in modular format to give students flexibility to select three topics most relevant to them from a list of Specialized Online Hydrology Courses (SOHCs)

HDFS - Human Development & Family Studies

HDFS 167-10, 11 SCHOLARS SEMINAR

Designed to reinforce the core values, theory and applied research upon which the UD Scholars program is founded. Reflects upon the relationship between the on-going first semester experience and the core values of the program: community, achievement, and scholarship.

HDFS 865-10 FATHERS AND FAMILIES

Focused study of fathers in families, and contextual diversity of fathering. Contemporary issues in research, policy and practice regarding fathering. Emphasis on developmental outcomes of fathering for both children and fathers.

HIST - History

HIST 167-70 HISTORY OF MODERN JAPAN

Explores Japanese history from the Meiji Restoration until the present through lectures and in-class discussions. Focuses on how Japan became a modern nation and the only non-Western major power in the pre-WW II period, and how Japan revived from the ashes in the postwar period.

HIST 268-10 SEMINAR: VIETNAM CONFLICTS

Using lecture, discussion, music, primary sources, film screenings, and secondary readings, this seminar provides understanding of the events and interpretations of the "Vietnam Conflict." Students present a research paper on a topic chosen in consultation with the instructor.

HIST 268-11 A 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 268-25 SEMINAR: THE FIRST WORLD WAR

Features opening discussions on the history and nature of historical writing followed by discussion of 19th century European history leading up to World War I.

HIST 327-10 TOPICS IN JEWISH HISTORY: JEWS, COMMERCE, AND BUSINESS

Explores why, for many centuries, Jews have gravitated towards careers in business and commerce, as merchants, bankers, peddlers, and entrepreneurs. Considers too, how these activities brought success, and, too often, anti-Semitism.

HIST 337-10 TOPICS IN AMERICAN HISTORY: AMERICAN MUSIC

From Robert Johnson to Tin Pan Alley; explore the ways people have produced and consumed music in American history. Topics include musical instruments, the recording industry, performance venues, the creation of American styles, and the people behind the music.

HIST 339-10, 80 IMPERIAL RUSSIAN HISTORY, C. 1600-1917

Examines Imperial Russian history from the mid-seventeenth century to the 1917 Revolution. Includes Russia's growth as a geographically vast empire, the autocracy that accompanied this growth; and, the responses of Russian people to the two developments.

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 Sciences**HLTH 467-10 LAW AND LEGAL POLICY, SCIENCE, AND TECHNOLOGY**

Examination of the ways in which legal reasoning intersects with scientific reasoning. Specific topics are from a spectrum of legal and scientific arenas, including intellectual property, medicine, the environment, constitutional law, criminal law, and civil liability rules.

HOSP - Hospitality Industry Management**HOSP 267-70 CULTURAL HERITAGE TOURISM**

Designed to familiarize student with the concept of heritage and tourism in rural societies. Deals with a wide range of cultural and natural heritages, and their strategic management plans for developing sustainable tourism. Students will collaborate on group presentations.

HOSP 367-70 TOURISM AND GASTRONOMY

Studies the culture & vocabulary of French gastronomy, & discovers the treasures of French regional cuisine as well as the culinary world of Paris. Students learn to communicate using both verbal and written French in common real-life situations of the culinary sector.

ITAL - Italian**ITAL 455-10, 80 CONTEMPORARY ITALY**

Considers Italy today, as a country of art preservation, or as a living culture between past and future; and Italian as a Language of Culture par excellence. Guides students through an examination of contemporary Italian culture and society.

JWST - Jewish Studies**JWST 327-10 TOPICS IN JEWISH HISTORY: JEWS, COMMERCE, AND BUSINESS**

Explores why, for many centuries, Jews have gravitated towards careers in business and commerce, as merchants, bankers, peddlers, and entrepreneurs. Considers too, how these activities brought success, and, too often, anti-Semitism.

LEAD - Leadership**LEAD 337-50 UNDERSTANDING A DIVIDED NATION**

Examines the various issues that divide our nation including gender, class, race, income and geography and the impact a divided nation has on the political landscape and society.

LLCU - Language, Literature & Culture**LLCU 167-70 ELEMENTARY CZECH**

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

LLCU 167-71 ELEMENTARY CZECH LANGUAGE & CULTURE

Stimulates students to interact in a new language and cultural environment, and to develop their own approach towards the Czech language and culture. Introduces relevant topics of Czech Studies. Acquaints students with Czech culture, history, arts and linguistic legacy.

LLCU 867-10 CRITICAL READING

Using texts from the MA lists in French and Spanish, this course helps students develop critical skills through the application of key approaches to textual analysis. Coursework will consist of weekly short reading and writing exercises. Taught in English with texts in translation.

MALS - Master of Arts in Liberal Studies**MALS 667-10 MEMORY SPEAKS: THE CRAFT OF CONTEMPORARY MEMOIR**

Creative, contemplative, and critical, Memory Speaks: The Craft of Contemporary Memoir is an exploration of the theory and practice of written recollection. Involves the study of influential memoirists' work, as well as workshop discussion of participant work.

MATH - Mathematics**MATH 267-11 INTEGRATED APPROACH TO CALCULUS**

Course integrates Calculus and PreCalculus.

MATH 367-10 SEM: PREPARATION FOR PUTNAM EXAM COMPETITION

Prepares students for the Putnam Exam. Covers techniques from most of the following topics, each taking one to two weeks; Combinatorics, Graph Theory, Inequalities, Number Theory, Analysis, Algebra, and Probability.

MATH 567-10 SEM: TOPOLOGY & ITS APPLICATIONS

Survey of combinatorial and algebraic topology and its applications. Includes topological manifolds, simplicial and cell complexes, categories, homological algebra, persistent homology, applications to biochemistry, sensor networks, signal processing, neuroscience, game theory, and robotics. Prereq: MATH349 or MATH351; CISC106 or CISC108; or permission of instructor. Students should be comfortable writing proofs and computer programs.

MSEG - Materials Science & Engineering**MSEG 667-13 ELECTRONIC STRUCTURE OF MOLECULES AND SOLIDS**

Covers molecular orbital theory, linear combination of atomic orbitals for simple molecules and polymers, tight binding and k.p. descriptions of semiconductors. Includes elements of group theory, spin-orbit coupling, effects of strain on band structures, and band alignments at interfaces.

MSST - Museum Studies**MSST 467-10 FUNDAMENTALS OF PROFESSIONAL FUNDRAISING**

Museum professionals will learn the basic elements of annual fund and capital campaign fundraising. We will also take an in-depth look at individual cultivation, qualification, solicitation and stewardship strategies.

MSST 467-11 BUDGETS: FINANCIALS FOR MUSEUM PROFESSIONS

Introduction to the principals and practical realities of budgeting and financial planning for museums and historical organizations.

MSST 467-12 CURATING HIDDEN COLLECTIONS & THE BLACK ARCHIVE

Research and digital curation of a recently rediscovered collection of photographs from the Baltimore region. Includes study of early African American portrait photography and an introduction to archival and theoretical challenges in making this collection and others like it available to the public.

MSST 606-10 CITIES ON A HILL: MATERIAL CULTURE IN 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.

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NTDT - Nutrition & Dietetics

NTDT 267-10 NUTRITION FOR PEAK PERFORMANCE

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

NTDT 267-11 SEMINAR: CULINARY NUTRITION

Laboratory experience in application and translation of nutrition recommendations into food preparation. Includes basic preparation and recipe modifications for: therapeutic diets for chronic medical conditions; food allergy, intolerance, and strict preferences; and food insecurity.

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NTDT 367-10 APPLICATION IN CLINICAL PRACTICE

Didactic, experiential learning opportunities in clinical nutrition (hosp setting), including application of nutrition care process, model to simple/complex medical conditions. Students complete comprehensive case study on patient w/ chosen medical condition. Prereq: NTDT250. Coreq: NTDT450 recommended.

NTDT 467-10 PEDIATRIC OVERWEIGHT & OBESITY

Examine the social determinant and behavioral factors that play a role in pediatric overweight and obesity, from early childhood to adolescence. Includes physical and psychosocial consequences of overweight and obesity in the pediatric population. Emphasis on implementation of evidence-based interventions and programs.

PHIL - Philosophy**PHIL 367-10 LOGIC FOR THE LAW**

Focuses on the formal logic that underlies the law. Prepares students for the logical structure of the problems on the Law School Admissions Test.

PHIL 465-10, 80 GLOBAL JUSTICE

Focuses on issues of global justice. Includes patriotism, nationalism, cosmopolitanism, human rights, immigration, economic development, global inequality, poverty, and civil disobedience.

PLSC - Plant & Soil Sciences**PLSC 167-11 GROWING YOUR OWN FOOD**

Basics of growing your own vegetables, fruits, herbs, grains, mushrooms and other foods. Focuses on Mid-Atlantic region. Work together to grow a garden plot. Special topics include preserving the harvest, processing and cooking what you grow, seed saving, community gardens, organic, beekeeping.

PLSC 467-16 MOLECULAR PLANT PATHOLOGY

Explores molecular aspects of resistant interactions, as well as those that lead to disease, from both plant & pathogen perspectives.

PLSC 467-18 APPLIED GENOMICS

Covers applications that harness the power of genome science to solve problems in medicine agriculture and the environment. Gain an understanding of the connection between fundamental research in genetics and its impact on society.

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POSC - Political Science

POSC 267-70 INTRODUCTION TO POLITICS II

Understanding and explanation political outcomes, processes and systems through the lenses of main theoretical approaches in comparative politics such as the institutional approach (historical institutionalism, neo and new institutionalism), structural approach, behavioral and cultural approach.

POSC 337-50 UNDERSTANDING A DIVIDED NATION

Examines the various issues that divide our nation including gender, class, race, income and geography and the impact a divided nation has on the political landscape and society.

POSC 447-10 NATIONAL AGENDA 2017, AS WE STAND / DIVIDED

Seventh annual National Agenda, explores the divides that exist in the United States, including gender, class, race, income, & geography. Six required events feature top speakers from across the country to address these important issues & how we communicate about them in today's political landscape.

PSYC - Psychology**PSYC 367-70 SEM: PSYCHOLOGY OF ART & CULTURE**

Approaches include psychological, psychoanalytic, psychosocial, and neuroscientific; to the study of art, culture, and society. Discusses film, painting, literature, art therapy, psychohistory, consciousness, dreams, surrealism, gender, ecology and economics.

PSYC367-71 PSYCHOANALYSIS OF FILM

Course serves as a foundation for, and intro to the key concepts, theories and approaches necessary for a deeper engagement in the psychoanalysis of culture. Also functions as a stand-alone course for all those interested in art, culture, psychology or society.

SOCI - Sociology**SOCI 267-70 SUBCULTURES: LIFESTYLES, LITERATURE AND MUSIC**

Provides critical insights into graffiti, street-art, underground, punk, hip-hop, psychedelia, alter-globalization movement, etc. Multidisciplinary perspectives of cultural, literary, & media studies are explored. Focusses on political interpretation of youth subversion and disclosures of power mechanisms.

SPAN - Spanish**SPAN 367-70 SPEAKING AND WRITING SKILLS 5 & 6**

Aims to be of fundamental linguistic support in areas of difficulties. Enables the student to understand and express him/herself in a variety of situations which may be unfamiliar, and which require exchanging informational and personal opinions using complex linguistic structures.

SPAN 467-70 ENGLISH-SPANISH TRANSLATION I: GENERAL THEMES

Deals with the 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.

SPAN 467-74 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 SPEAKING AND WRITING SKILLS 7 & 8

Aims to be of fundamental linguistic support in areas of difficulties the student may have at this level. Students will understand and express him/herself in a variety of situations which may be unfamiliar, and which require exchanging informational and personal opinions using complex linguistics.

UAPP - Urban Affairs & Public Policy**UAPP 167-10 INTRODUCTION TO CIVIC ENGAGEMENT**

Course content includes readings, service projects, and class assignments that will provide an opportunity for students to think critically about engagement while preparing them for the four year Community Engagement Scholars program.

UAPP 337-50 UNDERSTANDING A DIVIDED NATION

Examines the various issues that divide our nation including gender, class, race, income and geography and the impact a divided nation has on the political landscape and society.

UAPP 467-14 SEM: INTRO TO MICROSOFT EXCEL

Introduces spreadsheets and fundamental concepts of using MS Excel. Learn how to visualize data with charts and graphs, and how to use Pivot Tables, Formulas, Macros and Data Analysis tools. Enhance Excel skills with expert-led online video tutorials and graded Simulations. Allows students to learn anytime/anywhere.

UAPP 467-15 SURVEY RESEARCH METHODS

Introduces the major concepts of survey research, and prepares students in the fundamental skill areas necessary to design, conduct and evaluate complex survey research studies. Includes survey research design, questionnaire construction, scientific sampling, etc

UAPP 667-11 RACE, EQUITY, AND EDUCATION: DIALECTICS BETWEEN TEXTS AND COMMUNITIES IN WILMINGTON, DELAWARE

Confronts the complex history of educational texts and spaces in Wilmington, Delaware; considers Wilmington as a lens through which to examine issues of race and equity in education; and to work alongside Wilmingtonians to use texts to increase racial educational equity.

UAPP 667-14 SEM: INTRO TO MICROSOFT EXCEL

Introduces spreadsheets and fundamental concepts of using MS Excel. Learn how to visualize data with charts and graphs, and how to use Pivot Tables, Formulas, Macros and Data Analysis tools. Enhance Excel skills with expert-led online video tutorials and graded Simulations. Allows students to learn anytime/anywhere.

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UNIV – University Studies**UNIV 167-10 LEARNING TO SELF-ADVOCATE: KEYS TO SUCCESS**

Equips and empowers soon-to-be young professionals, with the tools necessary to self-advocate within the university setting and a larger global context. Examines self-advocacy skills that involve effectively communicating individual needs and wants, and navigates making decisions that lead to those goals.

UNIV 167-13 TRANSFER TRANSITION SEMINAR

Designed to facilitate the successful transition of new transfer students to the University of Delaware. Provides information about managing the transition, setting goals, and university resources.