# **Spring 2021 Supplemental Course Descriptions**

updated 12/05/2021

#### **Africana Studies**

## **AFRA 206-10 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 sociohistorical construction of Whiteness, the evidence of its privileging effects, and what solutions can be offered.

#### **Animal and Food Sciences**

## **ANFS 267-11 CLINICAL PRE-VETERINARY EXPERIENCE 2**

Continuation of advanced practical skills needed to obtain clinical experience in the field of small animal veterinary medicine, with a focus on feline and canine medicine. Clinical Pre-veterinary Experience 1 required Prerequisite or approval of instructor.

## **Applied Economics**

#### **APEC 867-11 RESEARCH METHODS FOR APPLIED ECONOMISTS**

Guides graduate students through the process of conducting research in applied economics. Topics include: the scientific process, research ethics, conducting a literature review, basic data management, research communication, and development of a research proposal.

#### **Arts and Science**

## **ARSC 300-10 GLOBAL ENVIRONMENTAL JUSTICE 2**

Explores issues of ethics, community engagement and activism in relation to environmental justice around the world. UD faculty and guest lectures focus on a variety of collaborative efforts to respond to environmental challenges and inequalities.

## **Art Conservation**

# **ARTC 464-12 METALS CONSERVATION INTERNSHIP**

Focuses on the examination, documentation, research, and conservation treatment of metal objects. Explores the ways in which metal objects were made and used around the world, their cultural significance, and deterioration mechanisms. The internship is a great introduction to conservation treatment.

## **ARTC 467-10 HISTORICAL MATERIALS & ART TECHNIQUES**

Explores the nature of raw materials and processing methods, methods of construction, care principles, and documentation approaches for basketry materials. Considers case studies of basketry objects from a wide variety of cultural traditions and studio techniques, from the point of view of technology and functions.

#### **ARTC 464-10 CERAMICS CONSERVATION**

Focuses on the examination, documentation, research, and treatment of ceramic objects from the Winterthur Objects Conservation Lab study collection. Explores ways in which ceramics were made and used around the world, their cultural significance, and deterioration mechanisms. The internship is a great introduction to conservation treatment.

## Art History

## ARTH 402-10, 80 DEPICTING RACE IN BLACK ART

contextualized comparison of the art of modern and contemporary African diasporas in the

#### **ARTH 406-81 ART AROUND CHARLEMAGNE**

Addresses art (especially manuscripts, ivories and metalwork) and architecture, for Charlemagne and members of his court circle, and will involve extensive consideration of literary and historical documents. Special focus on four cities: Paris, Aachen, Rome and Jerusalem.

### ARTH 419-10 ART & MATERIALITY IN THE IBERIAN WORLD

Examines the arts in diverse regions of the Spanish and Portuguese empires in light of the raw materials employed in their production, discussing not only the techniques and properties associated with each material choice, but also ways in which such substances were sourced and traded.

### **ARTH 601-10 METHODS & HISTORIOGRAPHY**

interpretation and theory including connoisseurship, iconography, semiotics, social art history,

## ARTH 602-10 CURATING MAPPAE MUNDI: ART OF CARTOGRAPHY EXHIBITION

designing proposals, curating objects, creating physical & digital exhibits, and writing catalog entries.

## **ARTH 606-11 ART AROUND CHARLEMAGNE**

Addresses art (especially manuscripts, ivories and metalwork) and architecture, for Charlemagne and members of his court circle, and will involve extensive consideration of literary and historical documents. Special focus on four cities: Paris, Aachen, Rome and Jerusalem.

### ARTH 619-10 ART & MATERIALITY IN THE IBERIAN WORLD

materials employed in their production, discussing not only the techniques and properties

#### ARTH 627-11 DOCUMENTARY, PHOTOGRAPHY, AND TRUTH

Considers the past and present of documentary photography as its theorists, makers, and users (artists, journalists, activists, bureaucrats, curators, etc.) have fashioned, negotiated, refused, and revised the terms of its definitionally unstable attachments to truth.

#### Biomechanics and Movement Sci.

### **BMSC 667-12 BIOMEDICAL SIGNAL PROCESSING**

application for research, with a hands-on approach in a combination of lectures, supervised

### **BMSC 667-13 NEUROBEHAVIORAL CONTROL OF GAIT AND POSTURE**

control, multisensory integration, transitional movements, and the impact of cognitive challenges

## **BMSC 867-10 COMMUNICATION AND CULTURE 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.

## Chemistry

#### CHEM 667-13 NMR SPECTROSCOPY: THEORY AND APPLICATIONS

Provides an overview of theory of NMR spectroscopy in solid state and solution and applications to a wide range of problems in chemistry, materials sciences, engineering, and life sciences. Comprised of lectures, computer exercises, and in class presentations.

## **Civil & Environmental Engineering**

## **CIEG 367-10 CEM FIELD SURVEYS**

activity. Students participate in on-site visits. Students will be responsible for their own

## **CIEG 467-10 ADVANCED BIM**

Covers advanced topics in building information modeling, including building assembly modeling, clash detection, construction animations and visualization, 4D scheduling, automated BIM quantity takeoff, and BIM collaborations. Prior Revit modeling experience is suggested.

## **CIEG 467-11 TEMPORARY STRUCTURES IN CONSTRUCTION**

Temporary structures in construction for example earth retaining structures, construction dewatering, tunneling supports, roadway decking, scaffolding, shoring, concrete formwork, cranes, and bridge false work. Safety and business aspects. Case studies in failures.

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## Computer and Info. Sciences

## **CISC 467-11 COMPUTING FOR SOCIAL GOOD**

from a Human-Computer Interaction perspective. Iteratively design, build, and evaluate an

#### **CISC 667-11 COMPUTING FOR SOCIAL GOOD**

from a Human-Computer Interaction perspective. Iteratively design, build, and evaluate an

## **CISC 689-11 INTRODUCTION TO NETWORK SCIENCE**

elements, principles of robustness, optimization and visualization. Practical work includes analysis of

#### **CISC 889-11 HUMAN-CENTERED ARTIFICIAL INTELLIGENCE**

Covers the implications of AI such as interpretability, reproducibility, corrigibility, ethics, automation, sustainability, democracy, and singularity. Following a high-level discussion of the topics, students will then choose theoretical or technical topics for in-depth discussions.

## Communication

## **COMM 200-10 HAPPINESS AND WELL-BEING**

include social scientific, philosophical, and applied approaches to social support, achievement,

## **COMM 640-10 INTERPERSONAL HEALTH COMMUNICATIONS**

Focuses on the bidirectional associations between physiology and communication. Students will

### Criminology

#### **CRJU 367-10 LAW POLICY & SOCIETY**

human rights, crime and social policy. Includes the religious, historical and cultural influences in law.

#### **Early American Culture**

## EAMC 606-10 ORAL HISTORY METHOD AND PRACTICE

Interdisciplinary course (held at Winterthur Museum) approaches the theory and method of oral history in a seminar; includes field work involving the practice of oral history using digital and analog methods for use in an academic and public setting. Instructor.

#### **Economics**

## **ECON 867-11 HOUSEHOLD FINANCE II**

models, including study of methods and instruments by which actors make their decisions, the

## **ECON 867-10 TOPICS IN DYNAMIC MODELING**

intertemporal choice. Begins with foundational material on function representation and object-

#### **Electrical Engineering**

## **ELEG 467-10 INTRODUCTION TO PHOTONICS**

photovoltaics, displays and communications. Includes electromagnetics, Maxwell's equations,

#### **ELEG 467-10 QUANTUM INFORMATION PROCESSING**

quantum key distribution protocols; Generalized measurements and quantum error correction;

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## **Epidemiology**

## **EPID 667-11 BIOSTATISTICS FOR HEALTH SCIENCES II**

applications for clinical and population health. Covers research designs, ANOVA, linear regression,

### **EPID 667-12 ENVIRONMENTAL HEALTH CONCEPTS IN PUBLIC HEALTH**

Surveys major topic areas of Environmental Health. Examines sources, routes, media, and health outcomes associated with biological, chemical and physical agents in the environment.

## **Finance**

## FINC 467-10 FINTECH AND FINANCE DATA SCIENCE

learning methods.

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learning methods.

## History

HIST 167-10 RACE AND RACISM: GLOBAL HISTORY AND REPRESENTATION

to oppress and how it has connected with other social categories as Indigeneity, gender, sexuality,

### HIST 268-10 HISTORY SEMINAR: WHAT IS LATINX?

Clarifies the complexities of Latinx by exploring the history of Latin American people and their descendants in the United States. Focuses on colonization of Latin American countries, migration patterns, and current representation of Latinx people in the United States.

## **HIST 268-14 SEMINAR: THE CRUSADES**

and mining of primary sources.

#### **HIST 268-11 SEMINAR: VIETNAM CONFLICTS**

Through readings, discussion, music, images, and film, explores the Vietnam War in the context of decolonization and revolution in the Vietnamese lands of the former French Indochina.

#### HIST 336-10 TOPICS IN LATIN AMERICAN HISTORY: HISTORY OF MEXICO

cultures, conquest, colonization, independence, reform, revolution, and twentieth century struggles

## HIST 337-11 TOPICS IN AMERICAN HISTORY: AMERICAN ASSASSINS

events, people and circumstances surrounding them.

## HIST 337-10 TOPICS IN AMERICAN HISTORY: AMERICAN ENVIRONMENTAL HISTORY

documents to explore the ways in which the environment has influenced human endeavors, and

## HIST 337-13 TOPICS IN AMERICAN HISTORY: HEALTH ACTIVISM

over compulsory vaccination to twenty-first century issues about healthcare biases against people

## HIST 365-11 TOPICS IN ASIAN & PACIFIC HISTORY: JAPAN'S WW II

what World War II looked like through the eyes of Japanese soldiers, scholars, children, politicians,

# HIST 400-10, 80 HISTORY CAPSTONE SEMINAR: MODERN US POLITICAL ECONOMY

capitalism, the changing face of modern opportunity, and the characteristics of contemporary elites,

## HIST 400-11 HISTORY CAPSTONE SEMINAR: US-CHINA RELATIONS

China moved from friends to enemies during the past two centuries. Explores major historical

## HIST 400-12 HISTORY CAPSTONE SEMINAR: 1916: THE EASTER REBELLION IN IRELAND

independence from Britain. Led by poets, playwrights, teachers and soldiers, the Easter rebellion

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independence from Britain. Led by poets, playwrights, teachers and soldiers, the Easter rebellion

#### **Health Studies**

#### **HLTH 467-10 CRAFTING HEALTHCARE**

healthcare that occurs outside the mainstream institutions.

## **Kinesiology & Applied Physiology**

### **KAAP 440-11 CLINICAL EXERCISE PHYSIOLOGY**

exercise prescription. Theoretical and practical covering of administrative aspects of testing,

#### **KAAP 440-10 SEX DIFFERENCES IN CHRONIC DISEASE**

incorporating scientific presentations and writing assignments.

#### **KAAP 640-11 HUMAN CARDIOVASCULAR CONTROL**

exercise, orthostasis and heat stress.

## KAAP 667-11 BRAIN IMAGING ¿ BASICS AND CLINICAL APPLICATIONS

Introduces the basic principles of neuroimaging methods as applied to human subject research. Focuses on fundamentals of MRI physics and image formation, experimental design, data analysis and applications of functional & structural MRI techniques in human motor control.

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

application for research, with a hands-on approach in a combination of lectures, supervised

## **KAAP 667-13 NEUROBEHAVIORAL CONTROL OF GAIT AND POSTURE**

control, multisensory integration, transitional movements, and the impact of cognitive challenges

### **Landscape Architiecture**

## **LARC 367-10 REGIONAL DESIGN STUDIO**

pertinent to residential and non-residential rural settings.

### **LARC 467-10 SENIOR DESIGN STUDIO**

foundation for graduate school. Students initiate an independent project, define the project

## **Master of Arts, Liberal Studies**

## MALS 600-10 ELEMENTS OF GLOBAL ECOFICTION

Invites you to think broadly and deeply about different ways of imagining and experienceing these

### **MALS 622-10 HISTORICAL LEGENDS**

Popular accounts, memoirs, novels, films, TV series shape perceptions of "how it was" and those perceptions, in turn, shape responses to current issues. Studies one of the great examples of history into legend (what actually happened in 1940), with side trips into other such episodes.

## **Marine Studies**

#### **MAST 467-14 TRACERS IN THE SEA**

nitrogen cycling, trophic transfer, microbe-mediated processes and indicators of climate change in

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## **Materials Science Engineering**

## **MSEG 667-15 ADVANCES IN 2D MATERIALS**

electronic, and photonic devices. Reviews different techniques used for their synthesis,

## Music

### **MUSC 467-11 ARABIC PERCUSSION**

Introduces students to instruments and music of Arabic percussion. Hands-on experience taught through oral tradition to create and develop a basic technical facility on each instrument and musical style studied in the course. No prior knowledge or musical experience is necessary.

#### MUSC 495-10 CLASSICAL AND POPULAR FORM

combination of original analysis and current scholarship, explores the intersection of harmony,

## **MUSC 611-10 MUSICAL WOMEN IN 17TH-CENTURY ITALY**

of how gender was both a liability and an asset for female composers whose musical pursuits as

### **MUSC 611-11 CULTURAL POLITICS OF MINIMALISM**

United States. Focuses on issues of power relations within both mainstream classical music and the

### MUSC 667-10 HARMONY THROUGH SOCIAL ENGAGEMENT

a lens through which students may acquire and apply skills necessary for launching, cultivating, and

### **MUSC 667-11 ARABIC PERCUSSION**

Introduces students to instruments and music of Arabic percussion. Hands-on experience taught through oral tradition to create and develop a basic technical facility on each instrument and musical style studied in the course. No prior knowledge or musical experience is necessary.

## **MUSC 677-10 A MUSIC EDUCATION TO EMPOWER**

Topics include issues of diversity in music education, culturally responsive teaching, music therapy,

# MUSC 695-10 EMPIRICAL/COMPUTATIONAL METHODS

Principles of computational thinking and study of empirical and computation approaches to music analysis with the goal of considering new ways to explore and study all types of music. Exploration of current literature on these topics and consideration of applications.

#### Neuroscience

#### **NSCI 467-13 NEUROLOGICAL DISORDERS**

common disorders and rarer conditions that provide a window into complex aspects of brain

## **NSCI 467-80 LEARNING, MEMORY AND THE BRAIN**

systems perspective to illustrate the diversity of brain systems and behavioral processes that govern

## **NSCI 667-10 LEARNING, MEMORY AND THE BRAIN**

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#### **Nutrition and Dietetics**

#### NTDT 367-11 OUTPATIENT NUTRITION

practical skills in applying nutrition coursework knowledge to assess nutritional status and meet the

## **Philosophy**

### PHIL 465-10 DEBUNKING AND DISAGREEMENT

are undermined because our mental states are not properly explained by their subject matter.

## PHIL 667-10 ETHICS IN DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

disaster science, policing, and e-commerce. Participation-based format. Topics include: privacy,

## **Physical Therapy**

#### PHYT 867-10 COMMUNICATION AND CULTURE 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.

## **Plant and Soil Sciences**

## PLSC 267-11 CLINICAL PRE-VETERINARY EXPERIENCE 2

animal veterinary medicine, with a focus on feline and canine medicine. Clinical Pre-veterinary

# PLSC 467-10 SEMINAR: PRINCIPLES OF INTEGRATED PEST MANAGEMENT

Applied course geared toward graduate students and upper level undergraduates. The objective is learning pest management strategies to be able to develop a decision-based framework for sustainable pest management, with special emphasis on plant diseases and insect pests.

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Applied course geared toward graduate students and upper level undergraduates. The objective is learning pest management strategies to be able to develop a decision-based framework for sustainable pest management, with special emphasis on plant diseases and insect pests.

#### Political Sci. & Intl Relations

#### **POSC 467-10 HATE AND EXTREMISM**

oppression. Provides a comprehensive examination of hate and extremism from a psychological

## **Psychology**

## **PSYC 467-10 HATE AND EXTREMISM**

oppression. Provides a comprehensive examination of hate and extremism from a psychological

#### **PSYC 467-81 INFANT COGNITION**

objects, spatial relations, speech sounds, and people. Considers sensory limits, biases that enable

### **PSYC 667-10 INFANT COGNITION**

objects, spatial relations, speech sounds, and people. Considers sensory limits, biases that enable

## **PSYC 867-12 AFFECTIVE NEUROSCIENCE**

Provides an introduction to theory and research in major areas of affective neuroscience methods with a particular emphasis on physiological substrates of affect and the relation of affect to cognition and psychopathology. Includes introduction to laboratory techniques.

## PSYC 867-10 CLINICAL PSYCH: PHILOSOPHY, HISTORY AND CURRENT PERSPECTIVES

Develops a better historical understanding of assumptions about the body, mind and brain that have led to current thinking about assessment and treatment of psychopathology.

## **PSYC 867-11 PROFESSIONAL DEVELOPMENT**

Professional development course specifically designed for graduate students in PBS and will cover a wide variety of topics, including time management, effective goal setting, and mentoring.

## Sociology

### **SOCI 367-10 LAW POLICY & SOCIETY**

human rights, crime and social policy. Includes the religious, historical and cultural influences in law.

#### **SOCI 467-10 LONG-TERM DISASTER RECOVERY**

Katrina, Typhoon Haiyan and the 2019 EU wave. Explores possible recover options from COVID-19.

## **SOCI 667-10 CRIME PROBLEMS & SOCIAL PROBLEMS**

problems, and policymaking. Relates to the sociology of social movements, political sociology, media sociology, policy studies, and folklore.

## **School of Public Policy & Administration**

# SPPA 667-10 ENVIRONMENTAL HEALTH TOPICS IN PUBLIC HEALTH

Survey of major topic areas of Environmental Health. Examines sources, routes, media, and health outcomes associated with biological, chemical and physical agents in the environment.

## **Statistics**

#### STAT 667-10 STATISTICS THEORY AND LEARNING FOR NETWORK DATA

Statistical theory and learning for network data. Topics include: network basics, descriptives, and sampling; latent space, block structure, and random graph model; graph testing, graph embedding, and community detection; machine learning on graphs.

#### **Theatre**

## THEA 467-10 ADVANCED HEALTHCARE THEATRE II

simulations in the areas of standardization, feedback, and adherence to the ASPE Standards of Best

## **Urban Affairs & Public Policy**

## **UAPP 667-10 ETHICS IN DATA SCIENCE AND ARTIFICIAL INTELLIGENCE**

Seminar on societal impacts of data gathering and analysis, with applications in health sciences, disaster science, policing, and e-commerce. Participation-based format. Topics include: privacy, algorithmic biases and data incompleteness, profiling, safety, and informed consent.

## **Women's Studies**

#### **WOMS 467-10 CRAFTING HEALTHCARE**

healthcare that occurs outside the mainstream institutions.