

# ***New Course Descriptions for Fall Term 2019***

## **Not Listed in 2018-2019 Catalog**

(updated 4/24/19)

### **ART 250: SPECIAL TOPIC: INTRODUCTION TO DIGITAL PHOTOGRAPHY (4)**

**Morales**

Through photographing weekly, in-class demonstrations, lectures, and critique, students will engage in the problems of digital photographic production and seeing. The course focuses on the technical and aesthetic issues of producing, editing, and printing digitally captured files. Students will leave this course with the following four things: 1) a comprehensive understanding of digital camera exposure, 2) a working knowledge of digital workflow in Adobe Lightroom, Camera Raw and Photoshop, 3) the skills to produce prints, and 4) an in-progress body of photographic work. Though a limited number of cameras will be available to be checked out temporarily, students are encouraged to provide their own digital cameras with manual controls and the ability to produce raw files. Lab fee required. No prerequisite. Open to first-year students.

### **BIOL 250: SPECIAL TOPIC: JUNIOR BIOLOGY SEMINAR (4)**

**Carmichael**

This course will introduce sophomore and junior biology majors to career options available in the field of biology. Topics will include careers in biology, the role of internships, graduate school application process (including human and animal medicine graduate programs), resume writing, and developing skills for interviews. This course is graded as pass-fail and is only open to biology majors with sophomore or junior standing or permission of the instructor.

### **BIOL/ES 350: SPECIAL TOPIC: BIOGEOCHEMISTRY (4)**

**Carmichael**

Much like the human body, the Earth's climate and ecological systems have been finely tuned to maintain homeostasis. In the human body, this occurs via feedback loops and exchange between major organ systems. In the Earth's climate and ecological systems, this balance is maintained by the flow of energy and materials. Biogeochemistry is the study of this flow of energy and materials within the Earth's planetary system. In this course, we will cover processes that control the cycling of C, N, and P and other biochemical elements in terrestrial and aquatic systems, with special emphasis placed on the coupling between human and natural systems. Topics include the origin of Earth and the development of elemental cycles, the Earth as a chemical system, the biogeochemical cycling of elements in the atmosphere, lithosphere, and biosphere, the global cycles of H<sub>2</sub>O, C, N and P, and the expanding human footprint on biogeochemical processes. Prerequisites: CHEM 101/102 or CHEM 105, BIOL 207 or BIOL/ES 117.

### **BIOL 350: SPECIAL TOPIC: EPIGENETICS AND GENE REGULATION (4)**

**Beach**

Epigenetics is the study of changes in organisms caused by modifications in gene expression that occur without changes in the DNA sequence. Epigenetic mechanisms are essential for normal development and tissue-specific gene expression patterns in mammals. In this course we will explore the molecular mechanisms that underlie epigenetic gene regulation. We will also examine disruptions in the epigenetic balance that ultimately lead to altered gene function and a host of diseases like cancer, immune disorders, neurological disorders and aging. Prerequisite: BIOL 236 or permission from instructor.

### **CLAS/ES 311: ENVIRONMENTAL HISTORY OF THE ANCIENT MEDITERRANEAN (4)**

**Salowey**

Humans have never existed in isolation but have had an awareness of and lived intertwined with the complex natural world that surrounds them. This is as true for the ancient societies in Mesopotamia, Egypt, Greece, and the Roman Empire, as it is for our contemporary world. Ancient mythologies, literature, theology, philosophy, and art give expression to the attitudes about nature. Farmsteads, urban centers, religious sanctuaries... and garbage pits preserve evidence of human alterations to their environment. New scientific and archaeological methods aid in exploring the adaptations forces on ancient inhabitants by earthquakes, floods, eruptions, landslides, and climate changes. This course introduces the essential primary and secondary sources, and research methods for discovering the destructive and successful ways humans have lived in the ancient Mediterranean, and explores and critiques a variety of case studies from across the region. (PRE – pending)

### **COMM 225: PUBLIC SPEAKING (4)**

**Presswood**

The theory and practice of public speaking, including selection of content, organization of ideas, language, and delivery; practice in extemporaneous speaking; training in critical analysis is provided through reading and listening to contemporary speeches. Open to first-year students. No prerequisite. May not be taken for credit by students who have already completed COMM 125.

**CMPS 325: MACHINE LEARNING (2)****Schrementi**

An introduction to machine learning with a focus on understanding the fundamentals of neural network learning. Topics include Hebbian learning, single and multi-layer perceptrons, and data preparation techniques for improving learning. Open to first-year students. Prerequisite: MATH 241 or equivalent.

**ENG 250: SPECIAL TOPIC: NATIVE AMERICAN POETRY AND FICTION (4)****Rosen**

In this course, we will read texts written by Native American writers in English from the nineteenth through twenty-first centuries. This class will also serve as an introduction to Native American and Indigenous Studies approaches to reading literature, and to discussing the concepts of identity and sovereignty. Authors include Zitkála-Sá, Mourning Dove, D'Arcy McNickle, Ray Young Bear, and Tommy Orange. Prerequisite: one semester of college work or permission.(w, x)

**ENG 350: SPECIAL TOPIC: MILTON AND HIS LITERARY AFTERLIFE (4)****De Groot**

Milton's Paradise Lost revolutionized literature in both content and form, picking up where Virgil and Dante left off to offer a religious epic for the modern world. The poem also inspired other writers to bold poetic innovations of their own. We'll examine Milton's work and then look at its impact on writers like William Blake, Mary Shelley, and Phillip Pullman. Prerequisite: sophomore standing.

**FREN 350: SPECIAL TOPIC: FROM THE CARIBBEAN TO THE INDIAN OCEAN (4)****Jégouso**

From the Caribbean to the Indian Ocean: a Survey of Literary Journals in French. In this course, we will focus on literary journals written in French from the Caribbean and the Indian Ocean from the 19th to the 21st century. We will read and discuss articles of prominent authors (such as Aimé Césaire, Suzanne Césaire, Édouard Glissant, Jacques Roumain, Nathacha Appanah...) and learn how literary journals played an essential role in the emergence of new types of literatures. Throughout the years, they became a unique space of expression for writers born in Martinique, Haiti, Guadeloupe, the Republic of the Comoros, and Mauritius as well as a counter discourse to French cultural imperialism. Class and discussion will be conducted in French. Prerequisite: a 200-level course.

**GWS/SOC 250: SPECIAL TOPIC: MENTAL HEALTH AND SOCIAL JUSTICE (4)****Matzner**

Our lives are deeply affected by our mental health. But what exactly does it mean to be "mentally healthy"? Indeed, what is "pathological"? What is "normal"? And who gets to decide? Utilizing an intersectional, interdisciplinary perspective, this class examines power and oppression within the field of mental health, while also critically exploring societal aspects of mental illness. No prerequisite.

**GWS/SOC 350: SPECIAL TOPIC: SOCIOLOGY OF GENDER (4)****Turner**

This course will examine the ways in which gender informs our experiences in the social world. We will specifically examine gender as it relates to our experiences within social institutions, such as work, family, and education. We will also look at gender as it relates to other facets of social identity, such as race, ethnicity, class, sexuality, age, and ability. Prerequisite: SOC 110

**HIST 250: SPECIAL TOPIC: AFRICAN AMERICAN HISTORY TO 1865 (4)****Florio**

Study of the lives of African-Americans in American society from the introduction of slavery through the end of the Civil War. Topics covered will include the nature of the slave trade, the evolution of the institution of slavery in America, the status of freed blacks in both the North and South, and the roles of African Americans in the battles for abolition and emancipation.

**INTL 350: SPECIAL TOPIC: GLOBAL HEALTH CHALLENGES (4)****Breske**

This course examines major global health policies, programs, and challenges. Throughout the semester, we will look at how social determinants of health affect populations around the world and will analyze current and emerging global health priorities, including emerging infectious diseases, health inequality, and major global initiatives for disease prevention and increased access to health systems.

**MATH 361: ANA: COMPLEX VARIABLES (2)****Wassell**

An introduction to complex analysis, with topics including the algebra of complex numbers, analytic functions, elementary functions, contour integrals, and Laurent series. Prerequisite: MATH 242 or equivalent.

**MUS 112: MARIACHI ENSEMBLE (1)****Rudolph**

Mariachi Ensemble is a group class devoted to the exploration, rehearsal, and performance of music from the mariachi tradition. No experience necessary. Open to first-year students. No prerequisite. Course fee \$150. May be repeated for credit.

**MUS 235: ORCHESTRATION (2)****Weddle**

Beginning with the study of orchestral families of instruments and how to read orchestral score, the course considers the characteristics and functions of instruments, timbres, ranges, transposition, technical abilities and limitations, idiomatic uses, effective combinations, instrumental colors. The course includes listening to repertoire and analyzing instrumentation. Students will be required to apply techniques through guided exercises including a final composition. Open to first-year students. Instructor permission.

**PHIL 250: SPECIAL TOPIC: POVERTY AND HUMAN CAPABILITY (4)****Lowney**

This course is about one of the most important social problems of our era: poverty in the midst of plenty. We examine poverty as a problem for individuals, families, and societies. We focus on the United States, perhaps one of the most impoverished of any developed nation. How should we define and measure poverty? Who is poor and who is not? Are there different kinds of poverty? What is it like to live in poverty? What are the causes of poverty? What are its effects on individuals (particularly children), families, communities, and societies? What values does it undermine? What moral and legal rights should the poor have, and what obligations do societies, governments, organizations, and individuals have to the poor? Do the poor also have obligations to themselves, others, and society? What are the plausible remedies for the negative aspects of poverty? Readings and lecture/discussions draw on economics, political science, psychology, philosophical and religious ethics, public policy analysis, sociology, journalism, and professional social work. Open to first-years. (f, w, x, DIV, MOD)

**PHYS 350: SPECIAL TOPIC: BIOPHYSICS (4)****Gentry**

This course explores current topics in biological physics with a focus on the physical biology of cells, including subcellular diffusion, bacterial locomotion, biopolymers, and molecular motors. The course will utilize concepts from thermodynamics, classical and statistical mechanics, hydrodynamics, and polymer physics. Prerequisite: PHYS 201 and 202.

**POLS 250: SPECIAL TOPIC: PRESIDENTIAL POWER (4)****Chenette**

Can the President do that? This course examines the grants and limits of presidential and executive branch power. Through original sources, students explore the historic and contemporary scope of authority held by country's highest office, from Constitutional crafting to case studies in separation of power, evidence of presidential leadership to evidence supporting impeachment. Open to first-years.

**PSY 250: SPECIAL TOPIC: COUNSELING THEORIES AND TECHNIQUES IN CONTEXT (4)****Mann**

This foundation course serves as a broad introduction to the field of counseling psychology. Through research, discussions and speakers, students will explore some of the varied contexts in which professional counselors are employed and the path to becoming a clinician in targeted settings. Students will gain a basic understanding of the main tenets of prevalent theories of counseling and be introduced to a variety of common techniques utilized by clinicians. As appropriate, experiential elements will be incorporated as opportunities to further understanding of how theory underlies techniques. Prerequisite PSY 141.

**PSY 450: SPECIAL TOPIC: SENIOR SEMINAR (4)****Michalski**

Prerequisite: senior psychology major or permission from the instructor.

**REL 250: SPECIAL TOPIC: ASIAN RELIGIONS (4)****Larson-Harris**

This course will discover the major religious traditions of Asia—Hinduism, Buddhism, Confucianism, and Taoism—within their cultural contexts. We will engage these religions in both their original forms and their modern practices, reading ancient texts and modern literature and watching films of religious rituals. This course will also study the lives of individuals who have shaped these traditions. We will encounter people who led influential, exemplary or provocative lives, and also learn how the modern practitioner attempts to live according to their precepts. No prerequisite; Open to first-year students.

## Courses with New Descriptions

**CMPS 160: APPLIED COMPUTING I WITH GOOGLE (4)****Wassell**

This introduction to computer science, developed by Google and their university partners, emphasizes problem solving and data analysis skills along with computer programming skills. Using Python, students will learn design, implementation, testing, and analysis of algorithms and programs. Within the context of programming, students will learn to formulate problems, think creatively about solutions, and express those solutions clearly and accurately.

Problems will be chosen from real-world examples such as graphics, image processing, cryptography, data analysis, astronomy, video games, and environmental simulation. Part of the course includes modelling collaborative team project work as is done at Google, and Google engineers will provide information about their careers in the tech industry. Prior programming experience is not a requirement for this course. Prerequisite: q.

**ENG/FILM 353: FILM AS A NARRATIVE ART I: INGMAR BERGMAN (4)**

**Dillard**

A study of films by directors such as Sir Alfred Hitchcock, Ingmar Bergman, and Roman Polanski as moral, aesthetic, and psychological narratives, with particular attention to the development of cinematic style in relation to concerns throughout their careers. Subject: Films of Ingmar Bergman such as *The Seventh Seal*, *Wild Strawberries*, *The Magician*, *Through a Glass Darkly*, *Winter Light*, *The Silence*, *Persona*, *Hour of the Wolf*, *Shame*, *Cries and Whispers*, *Fanny and Alexander*. Prerequisite: sophomore standing or permission of instructor.

**FILM/GWS 233: HORROR FILMS (4)**

**Ingle**

In this course, we will examine the form and politics of the horror film, as well as consider its status as a self-referential genre that deconstructs both its own conventions and film spectatorship itself. Films under study may include *Psycho*, *Halloween*, *The Shining*, *Scream*, and *Get Out*, with readings from Carol Clover, among others.

**FREN 261: TOPICS IN FRENCH I: FROM THE CARIBBEAN TO THE INDIAN OCEAN: A SURVEY OF LITERARY JOURNALS IN FRENCH (4)**

**Jégouso**

Development of conversational and writing skills through discussion and analysis of an aspect of French literature, language, society, or culture. The topic changes from year to year. The topic this year is: From the Caribbean to the Indian Ocean: a Survey of Literary Journals in French. In this course, we will focus on literary journals written in French from the Caribbean and the Indian Ocean from the 19th to the 21st century. We will read and discuss articles of prominent authors (such as Aimé Césaire, Suzanne Césaire, Édouard Glissant, Jacques Roumain, Nathacha Appanah...) and learn how literary journals played an essential role in the emergence of new types of literatures. Throughout the years, they became a unique space of expression for writers born in Martinique, Haiti, Guadeloupe, the Republic of the Comoros, and Mauritius as well as a counter discourse to French cultural imperialism. Class and discussion will be conducted in French. Open to first-year students who are placed by the department in a 200-level course. Prerequisite: FREN 112, FREN 118, or departmental placement in a 200-level course. (o, MOD)

**THEA 251: DRAFTING FOR THE THEATRE (4)**

**Forsman**

Designed to teach the basic principles and practices of executing technical drawings as they relate to scenic and lighting design. Open to first-year students with permission. Prerequisite: THEA 151. Lab fee: \$75.