J TERM 2021 EXPLORATIONS IN THE CORE, SEMINARS, & SPECIAL TOPICS COURSE DESCRIPTIONS

ACC-290-901 Special Topics in Accounting: Financial Literacy/Accounting for Non-Majors (2 credits)

An introduction to the most common financial concepts students will encounter. Students will explore daily topics like budgeting, cash management, and understanding debt, as well as long term goals like saving, investing, and retirement planning. Overall, the course will promote financial literacy for informed decision-making throughout the student's life.

ART-290-901 Special Topics in Studio Art: Web Design

This hands-on course emphasizes foundational design principles and website management. Students will learn how to plan, produce, and operate both personal and professional websites. By incorporating user experience, design standards, and visual hierarchy, students will gain an understanding of leading web design applications and software, culminating in the creation of an interactive personal website. CROSS-LISTED WITH COM-290-901 AND FMS-290-902.

ART-298-901 Special Topics in Art History: Art History from the LGBTQ Perspective

This course examines the history of art from ancient to contemporary periods through the lens of the LGBTQ perspective. Particular attention will be given to artists and works of art which have hitherto been underappreciated, undervalued and/or ignored through the traditional canon of the history of art.

BIO-290-901 Special Topics in Biology: Research in Comparative Genomics (1 credit)

Genomics, the study of complete genomes, is a subdiscipline of biology where genetics, molecular biology, and computational science intersect. Comparative genomics can be used to analyze and annotate a novel segment of genomic DNA sequence data that contains computationally predicted genes. In this course, we will develop skills in bioinformatic analysis by annotating regions in recently sequenced genomes from fruit fly species related to Drosophila melanogaster. A continuation of BIO 201 Genetics, this course will engage students in authentic inquiry-driven novel genomics research while developing skills in data analysis, problem-solving and scientific communication (both written and oral). Student-generated gene models that are supported by sufficient evidence and post-hoc analysis may be eligible for a "micropublication" in collaboration with the Genomics Education Partnership (GEP). Consent of instructor is required for registration.

COM-290-901 Special Topics in Communication Studies: Web Design

This hands-on course emphasizes foundational design principles and website management. Students will learn how to plan, produce, and operate both personal and professional websites. By incorporating user experience, design standards, and visual hierarchy, students will gain an understanding of leading web design applications and software, culminating in the creation of an interactive personal website. CROSS-LISTED WITH ART-290-901 AND FMS-290-902.

CSC-290-901 Special Topics in Computer Science: Real-World Data Analysis and Machine Learning (1 credit)

Students will implement standard data analysis and forecasting techniques in the Python programming language. Students will gain a working knowledge of the Python data science libraries "numpy", "pandas", "sklearn", and "matplotlib", which often appear in job listings. Under instructor supervision, students will implement a machine learning algorithm to solve a real-world forecasting problem from a Kaggle Competition. Students will be exposed to several machine learning algorithms. Students will learn and apply methods for data processing, feature engineering, and data transformation. CROSS-LISTED WITH MAT-290-901.

FMS-290-901 Special Topics in Film and Media Studies: Music and Film in Television

This course will explore the history, theory, techniques, and practitioners of music scoring in film and television. After an introduction to terminology and concepts, students will view and analyze scenes and entire films to understand how music integrates with and enhances this visual medium. No musical skills or experience required. CROSS-LISTED WITH MUS-290-901.

FMS-290-902 Special Topics in Film and Media Studies: Web Design

This hands-on course emphasizes foundational design principles and website management. Students will learn how to plan, produce, and operate both personal and professional websites. By incorporating user experience, design standards, and visual hierarchy, students will gain an understanding of leading web design applications and software, culminating in the creation of an interactive personal website. CROSS-LISTED WITH ART-290-901 AND COM-290-901.

FMS-490-001 Advanced Special Topics in Film and Media Studies: French Suffragette Film and Biography

Women's suffrage was the subject for films by France's legendary film pioneers, Alice Guy-Blaché and Georges Méliès including Guy-Blaché's Les Résultats du féminisme (1906) which depicts a world of gender-role reversal and Méliès's For the Cause of Suffrage (1909) and Fire! Fire! (1911) in which suffragettes are mocked. Remaining short films of these two directors will be studied in conjunction with two documentaries: Suffragettes in the Silent Cinema by Kay Sloan (2003) and Be

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Natural: The Untold Story of Alice Guy-Blaché by Pamela Green with narration by Jodie Foster (2018). In addition, the life of Hubertine Auclert, leader in the French suffrage movement in the 19th and early 20th century, will be studied through the biography of Auclert written by Steven C. Hause, Co-Director of European Studies at Washington University in St. Louis (Hubertine Auclert: The French Suffragette, 1987). The course will be conducted in English but can provide advanced credit for the French major if the writing and alternate readings are done in French. CROSS-LISTED WITH FRE-490-901.

FRE-490-901 Advanced Special Topics in French: French Suffragette Film and Biography

Women's suffrage was the subject for films by France's legendary film pioneers, Alice Guy-Blaché and Georges Méliès including Guy-Blaché's Les Résultats du féminisme (1906) which depicts a world of gender-role reversal and Méliès's For the Cause of Suffrage (1909) and Fire! Fire! Fire! (1911) in which suffragettes are mocked. Remaining short films of these two directors will be studied in conjunction with two documentaries: Suffragettes in the Silent Cinema by Kay Sloan (2003) and Be Natural: The Untold Story of Alice Guy-Blaché by Pamela Green with narration by Jodie Foster (2018). In addition, the life of Hubertine Auclert, leader in the French suffrage movement in the 19th and early 20th century, will be studied through the biography of Auclert written by Steven C. Hause, Co-Director of European Studies at Washington University in St. Louis (Hubertine Auclert: The French Suffragette, 1987). The course will be conducted in English but can provide advanced credit for the French major if the writing and alternate readings are done in French. CROSS-LISTED WITH FMS-490-901

HIS-290-901 Special Topics in History: Religion and Culture in the Ancient World

Why have humans always believed in beings they cannot see or prove to exist? This course studies the similarities and differences of ancient religions around the world up to the Christianization of the Roman Empire, paying special attention to how religion shaped ancient cultures. Topics will include creation, death, polytheism, the rise of monotheism, the nature of deities, the architecture of religion, divine monarchies, priests, women's roles, local and private religions, religious festivals, and religious laws. Using primary sources, students will understand this topic through the words and objects created by ancient people themselves and learn to critically analyze historical sources. This course will concentrate on the cultures of the ancient Mediterranean, Near East, and North Africa to understand the place and role of religion in ancient societies.

INT-290-902 Special Topics in Interdisciplinary Studies: Food and Culture

This course introduces students to the interdisciplinary field of Food Studies. Using food as an interdisciplinary framework, students will study how food interacts with culture and society. Embodying the phrase "you are what you eat," the course will examine how food builds us both biologically and culturally while also exploring how food encodes our social and cultural identities and interactions. Drawing from a vast array of disciplines, students will gain an understanding of foundational Food Studies concepts and theories, and explore how food functions within diverse disciplines such as sociology, history, psychology, cultural studies and more. CROSS-LISTED WITH SOC-290-901.

MAT-290-901 Special Topics in Mathematics: Real-World Data Analysis and Machine Learning (1 credit)

Students will implement standard data analysis and forecasting techniques in the Python programming language. Students will gain a working knowledge of the Python data science libraries "numpy", "pandas", "sklearn", and "matplotlib", which often appear in job listings. Under instructor supervision, students will implement a machine learning algorithm to solve a real-world forecasting problem from a Kaggle Competition. Students will be exposed to several machine learning algorithms. Students will learn and apply methods for data processing, feature engineering, and data transformation. CROSS-LISTED WITH CSC-290-901.

MUS-290-901 Special Topics in Music: Music in Film and Television

This course will explore the history, theory, techniques, and practitioners of music scoring in film and television. After an introduction to terminology and concepts, students will view and analyze scenes and entire films to understand how music integrates with and enhances this visual medium. No musical skills or experience required. CROSS-LISTED WITH FMS-290-901.

MUS-290-902 Special Topics in Music: Singer's Diction

All singers must study diction. To be an effective singer, one must have command of at least three languages besides English. The choral director must also have language skills in order to be able to explore a wide variety of literature. The purpose of this course is to provide the aspiring singer or choral director with effective knowledge and tools to obtain a basic proficiency in lyric diction.

This course focuses on the study of the International Phonetic Alphabet (IPA) and its application to Italian, English, German, and French. Students will learn the basics of singer's diction for each of these languages and demonstrate their knowledge through written examination, speaking, and singing.

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POL-290-901 Special Topics in Politics: Political Islam

This course examines the historical, political and theological roots of today's political Islam in its manifold expressions. The course focuses largely on the greater Middle East and North Africa (MENA), but also includes other important regions, such as Pakistan, Indonesia, Bosnia-Herzegovina. The late Ottoman period and the development of nation-states will be the approximate starting point for the class, and will continue through periods of modernization, post-colonialism and independence movements, to communal identity clarification in the era of globalization. The West and its interactions with the Muslim world will also be a key focus, examining especially why Western hegemonic aspirations have led to anti-Western backlash and the birth and growth of non-state Islamist groups. Key Islamist concepts, thinkers, and movements will constitute core elements of the course. Readings will be a combination of both primary and secondary sources.

This course is designed for students who desire to know more about the world inhabited by more than two billion Muslims. No particular background in Islam or the history of the Muslim world is necessary, although this certainly would be useful.

PHY-290-901 Special Topics in Physics: Brainwave Physics

This course provides an introduction to the electroencephalogram (EEG) and digital signal processing of neuroscience time series data using online EEG data and MATLAB. Topics include the physics of how EEG signals are generated and captured, EEG signal processing using the discrete Fourier transform, Morlet wavelets, Hilbert transforms, spatial filters/surface Laplacian, and also beamforming with EEG data. Functional MRI/BOLD measurement and data analysis are introduced, and the course concludes with a description of how the EEG is used in contemplative/meditation studies and a glimpse of future directions in cognitive electrophysiology. The text will be on the level of Cohen, "Analyzing Neural Time Series Data." The course includes an EEG computer lab using MATLAB. *Pre-requisites: PHY-102 and PHY-102L or PHY-202 and PHY-102L*.

SOC-290-901 Special Topics in Sociology: Food and Culture

This course introduces students to the interdisciplinary field of Food Studies. Using food as an interdisciplinary framework, students will study how food interacts with culture and society. Embodying the phrase "you are what you eat," the course will examine how food builds us both biologically and culturally while also exploring how food encodes our social and cultural identities and interactions. Drawing from a vast array of disciplines, students will gain an understanding of foundational Food Studies concepts and theories and explore how food functions within diverse disciplines such as sociology, history, psychology, cultural studies and more. CROSS-LISTED WITH INT-290-902.