Freshman Seminars

SPRING 2015

Sector I - Society

Desire and Demand

Marilynne Diggs-Thompson, House Dean, Riepe College House

The goal of this seminar is to understand and to investigate both historical and contemporary issues related to a culture of consumption. What cultural and socio-economic factors have led present day patterns of consumerism? When, why, how did issues of consumer confidence, and measures of consumer spending become critical and integral to the health of global economies? What are some of the characteristics of mass and conspicuous consumption in the Americas and abroad? And, during periods of national and household austerity can and will contemporary patterns of consumption change? Course readings are interdisciplinary- anthropological, historical, social, economic and political - and require a critical examination of global/local linkages. Discussions and research assignments incorporate topics such as popular culture, consumer culture, globalization, off-shore production, economics, marketing, consumer finance and the real estate market. In order to better understand the link between consumption and production factors an overarching question is what is the relationship between outsourcing and/or offshore production and modern consumption?

Cultural Diversity in the U.S. ANTH 086 301 Monday | 2:00 p.m. to 5:00 p.m.

Sector II - History & Tradition

Ancient Threads: Textiles in Anthropology and Archaeology

Anne Tiballi, Mellon Curricular Facilitator, Penn Museum

This course explores the deep and varied history of textile material culture across the world and provides students with the fundamental understanding of textile technology and production. We begin with a discussion of archaeological approaches to perishable materials, the chemical and physical properties of textiles fibers, and how they are differentially preserved in various environments. The technological processes and material remains of the "chaîne opératoire" of textile production- from raw fiber procurement and preparation, spinning and plying, dyeing, weaving, finishing, and use- provide the primary structure for the course. Case studies from various cultures, including Northern Europe, the Near East, North America, and the Andes, will be used to elucidate these processes and their cultural

dimensions. Finally, we will engage in a critical assessment of traditional and novel analytical methods used in textile studies, the methodological difficulties of working with perishable remains, and the social, political and gender aspects of textile use and production.

ANTH 048 301 Tuesday and Thursday | 10:30 a.m. to 12:00 p.m.

Rome & America

Campbell Grey, Associate Professor of Classical Studies

This course explores a range of social structures and contexts, cultural understandings and intellectual practices where the influence of Roman exemplars is discernible in both historical and present-day America. It presents students with Roman and American materials placed in explicit or implicit dialog with one another: e.g., descriptions and discussions of political processes and structures; attitudes towards games, public entertainments, and communal cohesion; rhetorics and vocabularies of public space. Among other tasks and projects, students will stage a 'reimagination' of the Constitutional (Philadelphia) Convention of 1787, which resulted in the United States Constitution. They will also emulate ancient moralists and satirists, who attacked Rome's 'Bread and Circuses' culture, by focusing their attention upon comparable practices in modern America.

Cross-Cultural Analysis CLST 029 301 Monday and Wednesday | 3:30 p.m. to 5:00 p.m.

How to Rule an Empire: an Introduction to European and U.S. Imperialism

Amy Offner, Assistant Professor of History

During the nineteenth and twentieth centuries, US and European powers developed changing strategies of empire designed to order societies at home and overseas. The practice of empire spurred worldwide debates that continue today: how did imperialism operate, what purposes did it serve, could it come to an end, and what might replace it? Over the course of two hundred years, these questions inspired some of the world's greatest fiction writing and historical research, and this seminar introduces students to a sample of classic texts. Together we'll examine varied forms of political, economic, and cultural power involved in imperial expansion; the experience and consequences of empire for both colonized and colonizer; and the emergence of anti-imperialist movements.

HIST 106 301 Thursday | 1:30 p.m. to 4:30 p.m.

Feith Family Seminar: Prophets and Prophecies in the Bible and Ancient Near East

Isabel Cranz, Assistant Professor of Near Eastern Languages & Civilizations

In this seminar we will study the prophets and the prophetic traditions of the Bible. Through careful reading of the biblical text, we will explore the lives of prophets such as Moses, Elijah, Elisha, Isaiah, Jeremiah and many others. We will explore both the available technique and necessary requirement for being a prophet. In order to contextualize the art of the biblical prophecy, we will also survey the prophets and prophecies of the ancient Near East. Detailed study of the prophetic traditions will enhance our understanding of biblical teachings and will also shed light on the manner in which prophets are viewed today.

NELC 055 401 JWST 055 401 Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

Sector III - Arts & Letters

Arts@Penn: Building Philadelphia

David Brownlee, Professor of History of Art

This seminar will explore the 330-year history of Philadelphia by examining fifteen or so dozen notable works of architecture and urban planning. Each week, the seminar will meet in a classroom and (usually) visit a site. We will meet with some of the architects and planners of recent projects. The objects of study will include the plan for Philadelphia (William Penn and Thomas Holme, 1683), Christ Church (John Keasley, 1727-44,1754), Samuel Powel House (Robert Smith[?], 1765), Fairmount Waterworks (Frederick Graff, Sr. 1819-21, Frederick Graff, Jr. 1859-62), Eastern State Penitentiary (John Haviland, 1821 ff), Please Touch Museum (originally the art museum of the Centennial Exhibition, Hermann Schwarzman, 1875-6), Fisher Fine Arts Library (originally University Library, Frank Furness 1888-91), University Museum (Wilson Eyre, etc., 1894-1929), Benjamin Franklin Parkway (many designers, 1907-18), PSFS Building (George Howe and William Lescaze, 1926-32), Richards Medical Research Building (Louis Kahn, 1957-64), Barnes Foundation, Philadelphia (Tod Williams and Billie Tsien, 2007-12), Dilworth Plaza (Stephen Kieran and James Timberlake, and Olin partners, 2010-), Philadelphia2035 master plan (Deputy Mayor Alan Greenberger, 2009-12). See video description.

Offered in conjunction with Penn's Art and Culture Initiative.

ARTH 100 301

Tuesday and Thursday | 3:00 p.m. to 4:30 p.m.

Spiegel-Wilks Seminar in Contemporary Art: Black and Grey

Aaron Levy, Senior Lecturer in the History of Art and in English; Executive Director of the Slought Foundation

The painter Eugene Delacroix once remarked that "the enemy of all painting is grey." For centuries, grey and black were considered to be without value and were often experienced negatively as non-colors. In recent decades, our cultural sensibilities have changed and these two colors are now central to the contemporary palette and conceptions of beauty. Why have they become so popular? How do these muted colors challenge us to think differently about color and society? How have they transformed art, fashion, identity and political movements in the 20th and 21st centuries?

This freshman seminar will introduce students to the ever-changing cultural history of black and grey. Each week we will study how our understanding of color is socially determined, through the work of individuals who have helped define our experience. Particular emphasis will be given to artists, writers, filmmakers and scholars who have restricted their palette to these particular colors. Some of the artists we will study include Kara Walker, Glenn Ligon, Marc Rothko, James Abbott McNeill Whistler, and Sol LeWitt. We will watch films by László Moholy Nagy, Alfred Hitchcock, Michael Haneke, and others, and read criticism by Johannes Itten, Ludwig Wittgenstein, Darby English, Michel Pastoureau, and other scholars. A variety of guest artists and scholars will also be invited to the campus to address the course.

In addition to weekly readings and responses, students will be expected to visit museums and cultural organizations in the Philadelphia area, and to attend a series of associated events on the topic of color at the Penn Humanities Forum.

ARTH 100 402 ENGL 016 402 Tuesday and Thursday | 10:30 a.m. to 12:00 p.m.

Modern American Poetry

Josephine Park, Associate Professor of English

This course will explore innovations in modern American poetry. We will begin with the founding contrast of modern American verse: Walt Whitman, with his open and capacious lines, and Emily Dickinson, with her incisive and sharpened verse. With these poles in mind, we will read a range of poetic voices: modernist instigations, including T.S. Eliot, Ezra Pound, and Langston Hughes; midcentury beats and confessions, including Jack Kerouac and Sylvia Plath; radical poets of the movement era; and more recent cultural and experimental turns. Moving through this significant and exciting literary arc, we will read closely and adventurously.

Course requirements: active participation and three short papers.

ENGL 016 301

Monday and Wednesday | 3:30 p.m. to 5:00 p.m.

Contact and Conflict: Literatures of Israel and Palestine

Amy Kaplan, Professor of English

The Palestinian/Israeli conflict is a subject of international headlines and intense controversy. This course introduces major Israeli and Palestinian novelists and poets, whose writing reveals the interior lives of individuals, communities, and social movements behind the slogans captured in the news. The course explores how Palestinians and Israelis narrate personal and collective stories to create a sense of identity, locate a place in history, and express longing for a homeland. Our discussions will contrast representations of common themes: loss and memory, exile and refugee, war and occupation, oppression and resistance. Readings include memoirs, novels, reportage, and poetry in English translation, and students who can read Hebrew or Arabic are welcome. Authors include Taha Muhammad Ali, Yehuda Amichai, Mahmoud Darwish, David Grossman, Emile Habiby, Ghassan Kanafani, Sahar Khalifeh, Amos Oz, A. B. Yehoshua, S. Yizhar. Assignments consist of one collaborative oral report, weekly responses to the readings, and two written essays.

Cross-Cultural Analysis ENGL 016 401 NELC 081 401 COML 016 401 Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

Italian Drama and the Performance of a Nation

Frank Pellicone, House Dean, Harrison College House

How did Italian drama and film influence help coalesce Italian national identity? In this course we will travel from antiquity to present day Italy, paying particular attention to the contributions of playwrights and filmmakers such as Machiavelli, Aretino, Bruno, Goldoni, Pirandello, Rossellini, Fellini, and Fo to discuss how their artistic achievements provided the backdrop for the performance of social constructs such as gender roles, class, and ethnicity toward the production of an Italian identity. When possible we will attend local theatrical performances and view screenings of relevant productions. All works will be read in English (with attention when possible to the original Italian). No prior knowledge of Italian is expected.

Cross-Cultural Analysis ITAL 217 401 CIMS 217 401 Tuesday and Thursday | 3:00 p.m. to 4:30 p.m.

Travelin': The Blues in World Perspective

Tim Rommen, Professor of Music

This course will explore the roots and routes of the blues in world perspective. We will devote a significant portion of the semester to identifying and wrestling with the social, racial, political, and musical histories of the blues in the United States. But this roots project will not be possible without also spending considerable energy engaging with

African musical practices, both historical and contemporary. In so doing, we will begin to recognize the patterns of circulation—the routes—that have at once contributed to shaping the blues and enabled the blues to shape other musical practices. In fact, we will discover that the blues has traveled widely (just as its lyrics so often suggest), making a home in new contexts and profoundly influencing popular musics along the way. With these roots and routes in mind, we will conclude the semester by tracing some of the itineraries of the blues in locations outside of the United States. What work is the blues doing in these locations? How are local communities finding it meaningful and productive in their lives?

Cross-Cultural Analysis MUSC 016 301 Tuesday | 1:30 p.m. to 4:30 p.m.

That's My Song!: Musical Genre as Social Contract

Guthrie Ramsey, Professor of Music

Music in American history has been fundamental to identity formation because, as one scholar notes, it comprises "the deepest feelings and qualities that make a group unique. Through moving and sounding together in synchrony, people can experience a feeling of oneness with others." This freshman seminar examines how various musical genres have served as "social contracts" among audiences throughout the process of this country's nation building. Within America's melting pot ideal, communities of listeners have asserted their powerful convictions about social identity through musical praxis and the "rules of engagement" surrounding the idea of "genre" that make meaning possible. From Protestant church performance practices, to minstrelsy, to Tin Pan Alley to rock and hip-hop, the social agreements of musical genres help us understand the dynamism of American identities.

MUSC 016 302

Tuesday and Thursday | 10:30 a.m. to 12:00 p.m.

Case Histories: Music and Visual Culture 1400 to 2000

Gina Rivera, Post Doctoral Researcher, Penn Humanities Forum

The course is an exploration of episodes in the history of visual culture--especially in painting, printing, and the writing of Western intellectual history--in dialogue with music, whether that music takes the form of performed songs, published pieces for orchestra, or the modern film soundtrack. As a survey of topics in art, creativity, authorship, and performance, the course will explore the following questions from recent scholarship in musicology, visuality, and the history of the book:

How we can address the relationship between an artist or author and his or her creative works?

How do artists interact with audiences of listeners, viewers, or readers?

How do images, sounds, and ideas spread through society?

How do artists and their creations shape public tastes and impact various mentalities?

Selected cases will be wide ranging, from the street songs and political cartoons of Revolutionary Paris to recently released covers of singles by Lou Reed, Linda Ronstadt, or Lorde. The practical framework for the seminar--the case history as form and idea--comes from the psychoanalytic work of Sigmund Freud (1856-1939). We will address weekly topics from a number of musical, visual, and critical vantage points, just as Freud cultivated the case history both as practical analytical tool and as formalized genre of writing and thinking.

MUSC 016 303

Tuesday and Thursday | 3:00 p.m. to 4:30 p.m.

Introduction to Acting

James Schlatter, Senior Lecturer in Theatre Arts

Rooted in the system devised by Konstantin Stanislavsky, this course takes students step by step through the practical work an actor must do to live and behave truthfully on-stage. Beginning with relaxation and physical exercises, interactive games, and ensemble building, students then learn and put into practice basic actor techniques, including sensory work, the principles of action, objectives, given circumstances, etc. The semester culminates in the performance of a scene or scenes most often from a modern American play. This course strongly stresses the responsibility of the actor to the work and especially to one's fellow actors. Practical work is supplemented by readings from Stanislavsky and a variety of other acting theorists, that may include Uta Hagen, Robert Cohen, Stella Adler, among others. Students are required to submit short essays over the course of the semester in response to the readings and in preparation for their final scene project.

THAR 120 301

Tuesday and Thursday | 1:30 p.m. to 3:00 p.m.

Sector IV - Humanities & Social Sciences

Music in Urban Spaces

Molly McGlone, Assistant Dean for Academic Advising

Open only to students enrolled in this seminar in Fall 2014. Music in Urban Spaces explores the ways in which individuals use music in their everyday lives and how music is used to construct larger social and economic networks that we call culture. We will read musicologists, cultural theorists, urban geographers, urban educators and sociologists who work to define urban space, arts education and the role of music and sound in urban environments. While the readings we do will inform our conversations and the questions we ask, it is within the context of our personal experiences working with a group of students at West Philadelphia High School and Henry C. Lea Elementary, two urban schools serving economically disadvantaged students, that we will begin to formulate our theories of the musical micro-cultures of West Philadelphia and education's role in shaping socio-economic realities. We will first consider what the listening and performing culture was when we were growing up and how, if at all, this music reflected the local definition of our environment as urban, suburban, or rural. In our work supporting classroom music teachers and after school music programs, we will consider the role that music plays in our cultural and social identities as well as how music and other extracurricular programs influence future educational opportunities. In what ways does the participation or consumption of music allow for social or economic mobility in urban spaces? Do the students in the high school or the elementary music programs use music to reflect, reject, or reinforce stereotypes about their own race, ethnicity, gender, or class? Class participants will be asked to create music videos or write research papers that develop a question of their interest related to music, education, social capital, and urban space. Ultimately seminar participants will ask does music reflect or change the cultural capital of those who participate in specific listening and/or performance spaces?

Cultural Diversity in the U.S. MUSC 018 401 URBS 018 Friday | 2:00 p.m. to 4:00 p.m.

Sector V - Living World

Forensic Neuroscience

Daniel Langleben, Associate Professor of Psychiatry, Perelman School of Medicine

Legal systems have attempted to evaluate and measure human behavior long before psychology, psychiatry and neuroscience were scientific disciplines. Current legal systems rely on behavioral science in both criminal and civil litigation. For example, intent is a prerequisite of criminal responsibility, motive is used to identify likely suspects, and mental illness or cognitive ability can be a defense to crime or a mitigating factor in a death penalty determination as well as a reason to deny a parent custody of a child. In the last decade, there has been substantial progress in behavioral neuroscience; a development not lost on the court system. Brain imaging techniques--such as functional and structural Magnetic Resonance Imaging and Positron Emission Tomography--have become part of all phases of legal proceedings and have forced courts to reconsider the use of behavioral science and the role of juries in courtroom decision-making. The goal of this course is to enable students to understand the present and the potential future role of behavioral neuroscience evidence in the justice system. The introductory part of the course will provide students with a very basic introduction to the judicial system and courtroom evidence and to the behavioral neuroscience constructs and techniques that are critical to law, such as motivation, violence, empathy, deception and morality. Students will then be asked to critically evaluate the use of brain imaging and other quantitative neuroscience techniques as evidence in representative legal cases. For each case studied, small teams of students will be assigned to serve as neuroscience advisors on each side of the case and will argue the strengths and weaknesses of the neuroscience evidence at issue. Students will be asked to prepare written arguments outlining the neuroscience evidence, present their arguments in class, and defend them against the opposing team. Case presentations will be followed by class and instructor comments. Performance evaluation will be based on students' oral case presentation (40%) and the written term paper (60%) developed from their case presentation. Through this course, students will learn the basic concepts in behavioral neuroscience, medical imaging and scientific legal evidence, and will develop the ability to critically evaluate neuroscience data in forensic and legal settings. This course is open to all undergraduate students and will be of particular interest to students with interest in law, neuroscience, criminology and psychology. Background in science or biology is helpful but is not required.

BIBB 050 301 Thursday | 3:00 p.m. to 6:00 p.m.

The Superbug Epidemic

Hillary C.M. Nelson, Associate Professor of Biochemistry & Biophysics, Perelman School of Medicine

The discovery of penicillin ushered in a new medical era - the antibiotic era - where patients no longer died from simple infections. We are now in a seemingly never-ending cycle of new antibiotics. However, the pipeline for antibiotics has slowed and we are rapidly entering the superbug era. We will use antibiotic resistance as a lens through which to understand the critical role that science plays in public health policy. At the end of the course, students should understand how these science-based public health decisions are made with the help of different stakeholders, which in this case include the government and healthcare system, basic and clinical scientists, the food industry and pharmaceutical companies, doctors and veterinarians, individuals and their communities.

BIOL 008 301

Tuesday and Thursday | 1:30 p.m. to 3:00 p.m.

Sector VI - Physical World

Honors Physics II: Electromagnetism and Radiation

Alan Johnson, Professor of Physics and Astronomy

The course parallels and extends the content of PHYS 151, at a somewhat higher mathematical level. Recommended

for well-prepared students in engineering and the physical sciences, and particularly for those planning to major in physics. Electric and magnetic fields; Coulomb's, Ampere's, and Faraday's laws; special relativity; Maxwell's equations, electromagnetic radiation.

Students must enroll in both the seminar (section 301, shown below) and one of the labs (302 or 303, below). The seminar meets for a fourth hour on: Mondays from 2:00 p.m. to 3:00 p.m.

PHYS 171.302 (lab) | Tuesday | 3:00 p.m. to 5:00 p.m., or PHYS 171.303 (lab) | Thursday | 6:00 p.m. to 8:00 p.m.

Quantitative Data Analysis PHYS 171 301 Monday, Wednesday, and Friday | 10:00 a.m. to 11:00 a.m.

Sector VII - Natural Sciences & Mathematics

Structural Biology

Ponzy Lu, Professor of Chemistry

This course will explain in non-mathematical terms how essentially all biological properties are determined by the microscopic chemical properties of proteins. It will also explain how research results, especially those of structural biology, are presented to its various audiences.

CHEM 022 301 Tuesday and Thursday | 8:00 a.m. to 9:00 a.m.

The Evolution of Language

Gareth Roberts, Assistant Professor of Linguistics

While communication is abundant throughout the living world, the human communication system we call language seems to stand out. Indeed, if humans themselves can be said to stand out among other species on Earth, it may well be language that played the crucial role in getting us here. So where does language come from? This question has been dubbed the hardest problem in science, but the last three decades have seen a notable renaissance in scientific attempts to answer it. This seminar will examine both the results of this multidisciplinary endeavor and the tools that have been employed in it. It will involve discussions of the nature of language and its place among other communication systems and will touch on fundamental questions of what it means to be human.

LING 057 301 Tuesday and Thursday | 10:30 a.m. to 12:00 p.m.

Vagelos Integrated Program in Energy Research (VIPER) Seminar

Andrew M. Rappe, Professor of Chemistry

This is the first part of a two-semester seminar designed to introduce students to the VIPER program and help them prepare for energy-related research. Research articles on various energy-related topics will be discussed, and students will be guided toward their research topic selection. Library research, presentation of data, basic research methods, research ethics, data analysis, advisor identification, and funding options will also be discussed. Sample energy topics discussed will include: Applications of nanostructured materials in solar cells; Solid oxide fuel cells; Global climate

modeling: radiant heat transfer; Nanocrystal-based technologies for energy storage; Photo-bioreactor systems for mass production of micro-algae; Advanced rare earths separations chemistry; Modeling of oxides for solar energy applications; and Electronic transport in carbon nanomaterials.

VIPR 120 301 Tuesday | 11:00 a.m. to 12:00 p.m.

Seminars in Mathematics

Proving Things: Algebra

Marton Hablicsek, Lecturer in Mathematics

This course focuses on the creative side of mathematics, with an emphasis on discovery, reasoning, proofs and effective communication, while at the same time studying arithmetic, algebra, linear algebra, groups, rings and fields. Small class sizes permit an informal, discussion-type atmosphere, and often the entire class works together on a given problem. Homework is intended to be thought-provoking, rather than skill sharpening.

MATH 203 301

Tuesday and Thursday | 3:00 p.m. to 4:30 p.m.

Math in the Age of Information

Ted Chinburg, Professor of Mathematics

This is an experimental course about mathematical reasoning and the media. Embedded in many stories one finds in the media are mathematical questions as well as implicit mathematical models for how the world behaves. We will discuss ways to recognize such questions and models, and how to think about them from a mathematical perspective. A key part of the course will be about what constitutes a mathematical proof, and what passes for proof in various media contexts. The course will cover a variety of topics in logic, probability and statistics as well as how these subjects can be used and abused.

MATH 210 301 Monday, Wednesday, and Friday | 12:00 p.m. to 1:00 p.m.