First-Year (Freshman) Seminars Fall 2019

Desire and Demand

Marilynne Diggs-Thompson, Adjunct Assistant Professor, Riepe House Dean

Does consumption shape culture or does culture shape consumption? As even the most mundane purchase becomes socially symbolic and culturally meaningful we can persuasively argue that the concept of "need" has been transformed. Analyzing a variety of physical and virtual consumer venues, the goal of this seminar is to understand and to analyze historical and contemporary issues related to a culture of consumption. We investigate social and political-economic factors that impact when and how people purchase goods and argue that behavior attached to consumption includes a nexus of influences that may change periodically in response to external factors. Readings and research assignments are interdisciplinary and require a critical analysis of global/local linkages. The city of Philadelphia becomes the seminar's laboratory as we ask: how have issues of culture, consumption, and global capitalism become intertwined around the world?

ANTH 086 301

M | 0200PM-0500PM | UNIVERSITY MUSEUM 329 **Fulfills:** Sector I: Society | Cultural Diversity in the U.S.

Globalization: Causes and Effects

Brian Spooner, Professor of Anthropology

Class sessions will be devoted to discussion of the dynamics of globalization with the objective of illuminating the world-historical context of the changes that are happening around us unevenly in different parts of the world today, and developing critical approaches to the available research methodologies and explanatory theories. Weekly readings will be selected from the major researchers in the field, and students will test their ideas in short research projects of their own on questions arising from the discussions. The overall approach will be historical and comparative. Apart from weekly assigned readings and participation in class discussions, requirements for the course include three short research papers.

ANTH 155 301

T | 0130PM-0430PM | UNIVERSITY MUSEUM 345 Fulfills: Sector I: Society

30 Americans

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

This Spiegel-Wilks Curatorial Seminar explores issues of racial, sexual, and historical identity in contemporary culture as they intersect with the politics of museum display over the last three decades. Offered in collaboration with the Barnes Foundation, and co-taught with Executive Director and President Thom Collins, the course will pay particular attention to the importance and influence of artistic legacy, cultural critique, and community across generations. In addition, students will be provided with an immersion in curatorial and museum studies and will have the opportunity to interact with curators, scholars, and staff at the museum and Penn. The course syllabus will build upon the pioneering exhibition "30 Americans" organized by the Rubell Family Collection, and catalog essays by Robert Hobbs, Glenn Ligon, Franklin Sirmans, Michele Wallace, and others. As part of the course, students will also conduct research and contribute to the exhibition at the Barnes Foundation, where the course will meet weekly. This seminar requires permission from the instructor. Please contact Dr. Aaron Levy at adlevy@upenn.edu.

ARTH 100 401 | ENGL 017 401

M | 0200PM-0500PM | Fulfills: Sector III: Arts & Letters

Neurobiology of Brain Disorders

Marc Dichter, Professor of Neurology The human brain is clearly the most complicated and magical organ in the body. We don't completely understand how it works, but we do know, unfortunately, for a variety of reasons, the human brain is prone to failure, either by acute injury, chronic degeneration, genetic flaws in its composition, or unknown disturbances in its behavior. Diseases of the brain can take many forms but are all uniformly devastating for individuals, families, and our society, and are also very costly. This course will explore the ways in which various brain disorders (both neurological and psychiatric) manifest themselves and discuss their underlying neurobiological mechanisms. In addition, the social and economic impact of these diseases in society will be considered, as well as some well publicized political issues surrounding many of these brain disorders.

BIBB 030 301

TR | 0300PM-0430PM | CLAIRE M. FAGIN HALL (NURSING 112 **Fulfills:** Sector V: Living World

Forensic Neuroscience

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

Progress in behavioral neuroscience and brain imaging techniques, such as functional and structural Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET) has forced the courts to reconsider the role of behavioral sciences in courtroom decision-making. The goal of this course is to enable students to understand and interpret the use of behavioral neuro evidence in the justice system. The course will introduce the students to the relevant behavioral neuroscience constructs, principles of brain imaging and rules of scientific evidence. Students will be asked to use this introductory knowledge to critically evaluate the use of brain imaging and other behavioral neuroscience techniques as evidence in representative legal cases. For each case, students will serve as neuroscience experts for the defense or prosecution and prepare, present and defend their testimony against the opposing team. Through this course, students will develop the ability to critically evaluate brain imaging and other neuroscience data in forensic and legal settings.

BIBB 050 301

W | 0200PM-0500PM | LEIDY LAB 109 Fulfills: Sector V: Living World

The Genomic Revolution

Eric Weinberg, Professor Emeritus of Biology

The goal of this course is to convey a basic understanding of human genome science and in so doing, to learn of its impact on treatment of human disease and discernment of aspects of human identity. Our current understanding of the structure and function of genes will allow a personalized treatment for many diseases, but just how such advances are applied will involve ethical as well as scientific considerations. We will discuss how the field of genetics has been changed dramatically by the ability to clone and sequence genes, and then to be further transformed by massive sequencing of whole genomes. A major part of the course will be devoted to how these advances have led to understanding and treatment of genetic disease and cancer. We will also discuss the tremendous potential (and dangers) of gene editing advances. Finally, we will explore how genomics has allowed an understanding of deep human history, as well as the ability to decipher one's more immediate ancestry. Readings will be from a number of books written for an informed general audience rather than from a textbook. The seminar should be of interest particularly to students who eventually might be interested in taking courses in the Life Sciences but initially would like an introductory seminar-type approach within a focused area.

BIOL 005 301

TR | 0130PM-0300PM | CLAIRE M. FAGIN HALL (NURSING 214 **Fulfills:** Sector V: Living World

Structural Biology & Genomics

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

TR | 0800AM-0900AM | CHEMISTRY BUILDING B13 Fulfills: Sector VII: Natural Sciences & Mathematics

Quantum & the Computer

Max Mintz, Professor of Computer Science

This Freshman Seminar is designed to be a very introductory exposition about Quantum Computation and Quantum Information Science. There are no formal physics, mathematics, or computer science prerequisites. It is meant primarily for freshmen in SAS and Wharton, who have an itch to learn about a beautiful subject that intrinsically unites quantum physics, computation, and information science. The structure of the course will be lecture-based using small-team based exercises for evaluation. The enrollment will be limited to 20 students.

CIS 181 301

MWF | 1200PM-0100PM | TOWNE BUILDING 309 Fulfills: Sector VII: Natural Sciences & Mathematics

Iliad and Its Afterlife

Sheila Murnaghan, Professor of Classical Studies

As the first work in the western tradition, Homer's Trojan War epic, the *lliad*, has been a constant point of reference for thinking about heroism, friendship, the search for meaning in the face of mortality, and the effects of war on individuals and societies. We will begin with a close reading of the *lliad* in English translation, paying attention both to the story of its hero Achilles as he experiences disillusionment, frustration, anger, triumph, revenge, and reconciliation and to the poem's broader portrait of a society at war; this portrait incorporates the diverse perspectives of invaders and defenders, men and women, old and young, gods and mortals, along with tantalizing glimpses of peacetime life. We will then consider how later writers and artists have drawn on the *lliad* to present a range of perspectives of their own -- whether patriotic, mock heroic, romantic, or pacifist -- with particular attention to 20th and 21st century responses by such figures as W.H. Auden, Simone Weil, Jonathan Shay, Cy Twombly, David Malouf, Alice Oswald, and Adrienne Rich. No previous knowledge of the *lliad* is required. The course is intended for anyone who is interested in how cultures use their shared myths both to affirm and to question their central values.

CLST 011 301

TR | 0300PM-0430PM | Fulfills: Sector III: Arts & Letters | Cross Cultural Analysis

Private Life in Ancient Rome

Kimberly Bowes, Associate Professor of Classical Studies

What was it like to live in the Roman world? What did that world look, taste and smell like? How did Romans raise their families, entertain themselves, understand death, and interact with their government? What were Roman values and how did they differ from our own? This course takes as its subject the everyday lives of individuals and explores those lives using the combined tools of archaeology, art and written sources. In doing so, it seeks to integrate the well-known monuments of Roman civilization into a world of real people. Some of the topics explored will include Roman houses, diet, leisure, gender and sexuality, slavery, and poverty.

CLST 012 301

MW | 0200PM-0300PM | WILLIAMS HALL 302 Fulfills: Sector II: History & Tradition | Cross Cultural Analysis

Shakespeare / Non- Shakespeare

Zachary Lesser, Professor of English

In this course we will undertake an intensive study of Shakespeare by reading some of his plays side-by-side with plays by other contemporary dramatists on the same subject. This approach will help us not only to put Shakespeare back into his historical context and into his collaborative, rivalrous conversations with fellow dramatists, but also to "isolate" Shakespeare's distinctive contribution to Renaissance discussions of such

issues as travel and exploration, racial and religious difference, English history and the politics of kingship, war and rebellion, love and marriage. Our readings will include Shakespeare's The Merchant of Venice and Christopher Marlowe's The Jew of Malta; Shakespeare's The Tempest and John Fletcher's The Sea Voyage; Shakespeare's The Taming of the Shrew and Fletcher's The Woman's Prize, or Tamer Tamed; Shakespeare's Hamlet and Thomas Middleton's The Revenger's Tragedy. No prior experience with Shakespeare or Renaissance drama is necessary, as the course will introduce students to the exciting range of plays produced in the period, to the sorts of critical questions scholars ask of these plays, and to the research methods they use to study them. Assignments will include explorations in the rare book library and

Early English Books Online; a brief class presentation; and a couple papers.

ENGL 016 301

MW | 0200PM-0330PM | VAN PELT LIBRARY 627 Fulfills: Sector III: Arts & Letters

Culture and Power

Jennifer Sternad Ponce De Leon, Assistant Professor of English

As this seminar explores the many ways in which culture is implicated in relations of power, we will address such questions as: how are our worldviews, including our sense of who we are, shaped by what we read and see? How are some people's views of the world imposed over others'? How do corporations and governments shape culture, and why have revolutionary thinkers insisted that culture is an important battlefield in efforts to effect significant social change? We will study culture in a broad sense, including questions of identity, ideology, and social norms, while focusing especially on the politics of cultural production, including film, literature, news media, theater, and visual art. You will have the opportunity to develop your own creative project in this course.

ENGL 016 302

MW | 0200PM-0330PM | NEW COLLEGE HOUSE 103 Fulfills: Sector III: Arts & Letters

21st- Century Autobiography

Max Cavitch, Associate Professor of English

Autobiography is at once the most popular and sophisticated genre of our time. From international bestsellers to contemporary classics to challenging experiments, more autobiographies are written and read than any other kind of 21st-century book. We'll explore this literary-historical phenomenon and the many forms of autobiography (including graphic memoir, heterobiography, autofiction, witnessing, autothanatography, travelogue, jockography, genealogy, and ecobiography) that have been making our bookshelves groan and our server-farms swell. Our seminar's focus will be on reading and discussion of a diverse range of 21st-century autobiographical works that raise (as autobiographical writing has always done) urgent questions of living-questions about identity, selfhood, experience, and responsibility. We'll read dazzling recent works by the likes of Paul Auster, Ishmael Beah, Alison Bechdel, Edwidge Danticat, Paul Kalanithi, Mary Karr, Karl Ove Knausgård, Kiese Laymon, Maggie Nelson, Patti Smith, and Adam Zagajewski. With its focus on autobiography, this seminar will enhance your understanding of many central concepts in literary studies, including genre, voice, persona, form, style, point of view, audience, theme, and period. Seminar discussions and a series of very short essay assignments will help you to hone your speaking and writing skills. There will also be a number of brief, straightforward quizzes—but no mid-term or final exam. This seminar satisfies the Sector 6 requirement of the English Core curriculum.

ENGL 016 303

MW | 0200PM-0330PM | FISHER-BENNETT HALL 323 Fulfills: Sector III: Arts & Letters

Curiosity to Knowledge: Research: From Curiosity to Knowledge

Ann Kuttner, Associate Professor in History of Art, Gregory Guild, Professor of Biology How does one act on curiosity about the physical and living world and the human cultures in it? This seminar will use case-study and brainstorming approaches to visit how people define good questions and practice research in a range of disciplines, from the humanities and social sciences to natural sciences and engineering. We are especially interested in common components (e.g., evidence) and how it differs among a broad spectrum of phenomena and human behavior, and how might we observe and trace patterns in it, to find new ideas and answers. Our sessions, will also highlight field-specific approaches for translating evidence into knowledge. For example, we examine and interpret genomes and paintings in different ways by employing experiments and historical methods, respectively. In a comparative approach, we will explore what analysis and interpretation of primary evidence looks like, from statistical patterning or materials testing to visualization and narrative. The class will include some field trips to active research sites, like labs, archives and museums. Students will play an active role in the sessions, and try out various kinds of response, written and oral. Our goal is to enable students to participate in and appreciate how research is performed in a range of areas, as a stimulus to using the arts of observation and questioning for whatever might be their own objects of curiosity.

FRSM 002 301

W | 0200PM-0500PM | VAGELOS LABORATORIES 2000

Jews and China: Views From Two Perspectives

Kathryn Hellerstein, Associate Professor of Germanic Languages

Jews in China??? Who knew??? The history of the Jews in China, both modern and medieval, is an unexpected and fascinating case of cultural exchange. Even earlier than the 10th century, Jewish traders from India or Persia on the Silk Road settled in Kaifeng, the capital of the Northern Song Dynasty, and established a Jewish community that lasted through the nineteenth century. In the mid-nineteenth century, Jewish merchants, mainly from Iraq, often via India, arrived in China and played a major role in the building of modern Shanghai. After 1898, Jews from Russia settled in the northern Chinese city of Harbin, first as traders and later as refugees from the Bolshevik Revolution and Russian Civil War. In the first decades of the twentieth century, a few Jews from Poland and Russia visited China as tourists, drawn by a combination of curiosity about the cultural exoticism of a truly foreign culture and an affinity that Polish Jewish socialists and communists felt as these political movements began to emerge in China. During World War II, Shanghai served as a port of refuge for Jews from Central Europe. In this first-year seminar, we will explore how these Jewish traders, travelers, and refugees responded to and represented China in their writings. We will also read works by their Chinese contemporaries and others to see the responses to and perceptions of these Jews. We will ask questions about cultural translation: How do exchanges between languages, religions, and cultures affect the identities of individuals and communities? What commonalities and differences between these people emerge?

GRMN 026 401 | JWST 026 401

TR | 0130PM-0300PM | DAVID RITTENHOUSE LAB 4E9

Fulfills: Sector II: History & Tradition | Cross Cultural Analysis

Euro Zone Crisis - The EU in a Currency War For Survival?

Susanne Shields, Lecturer in German Language and Culture

"Let me put it simply...there may be a contradiction between the interests of the financial world and the interests of the political world...We cannot keep constantly explaining to our voters and our citizens why the taxpayer should bear the cost of certain risks and not those people who have earned a lot of money from taking those risks." Angela Merkel, Chancellor of Germany, at the G20 Summit, November 2010. In January 1999, a single monetary system united Germany, a core nation, with 10 other European states. Amidst the optimism of the euro's first days, most observers forecast that Europe would progress toward an ever closer union. Indeed, in the ensuing decade, the European Union became the world's largest trading area, the euro area expanded to include 17 member states, and the Lisbon Treaty enhanced the efficiency and democratic legitimacy of the Union. In 2009, Greece's debt crisis exposed deep rifts within the European Union and developed into a euro zone crisis - arguably the most difficult test Europe has faced in the past 60 years. After two years of a more benign EURO debt situation, the risk of recession, EU sanctions agains Russia, and a possible collision of a newly-elected Greek government with its creditors, the euro crisis returned with a vengeance in 2015. In addition, the pressure mounts for European leaders to find a

solution to the refugee crisis which reached a peak in the fall of 2015. In 2016 the Brexit delivered the latest blow to the European Union, and the future of the European project without the UK looks bleak. The Economic and Monetary Union (EMU) is still fragile, and economic and political developments in 2017 could determine the future of the euro. Does the EU have what it takes to emerge from these crises? Will the European nations find a collective constructive solution that will lead to a fiscal union that implies further integration?

GRMN 027 301

TR | 1030AM-1200PM | TOWNE BUILDING 307 Fulfills: Sector I: Society

Why College?

Jonathan Zimmerman, Professor of History of Education

This course will explore controversies and dilemmas surrounding American colleges, from their birth into the present. What is the purpose of "college"? How have these goals and objectives changed, across time and space? What should college do, and for whom? And how can colleges be reformed to meet their diverse purposes and constituencies? Topics of discussion will include affirmative action, "political correctness," fraternities and sororities, sexual assault and safety, online education, and the recent trend towards "college for all."

HIST 104 301

MW | 0330PM-0500PM | FISHER-BENNETT HALL 25 Fulfills: Sector II: History & Tradition

Africa in World History

Lee Cassanelli, Associate Professor of History

This seminar examines Africa's connections--economic, political, intellectual and cultural--with the wider world from ancient times to the 21st century, drawing on a diverse sample of historical sources. It also explores Africa's place in the imaginations of outsiders, from ancient Greeks to modern-day development "experts." Whether you know a lot or almost nothing about the continent, the course will get you to rethink your stereotypes and to question your assumptions about the importance of Africa in world history. **HIST 106 301**

MW | 0330PM-0500PM | COLLEGE HALL 318 MW | 0330PM-0500PM | Fulfills: Sector II: History & Tradition | Cross Cultural Analysis

Of Horses, Bows, & Fermented Milk: The Turkish Empires In 15 Objects

Oscar Aguirre Mandujano, Assistant Professor of History

The empires of the Turkic and Turkish peoples have stretched across much of Eurasia since before the Common Era until the twentieth century. We first hear of them in Chinese chroniclers' tales of a powerful people in the wilderness. Greek historians, Byzantine writers, and Arab polymaths write about the empires of the steppes. Centuries later, the heirs of the heroes of these empires move south and west, establishing empires and tribal confederations beyond the steppe, in Central Asia, Anatolia, and the Middle East. The Turkic empires seem to appear in the periphery of many civilizations, challenging and, one could say, enriching their borders. But looking at a map, is really more than a half of Eurasia a periphery? If we flip the map, could we say these historians were writing from the margins of the Turkish empires? This course introduces the student to the history of empire by following the various histories of Turkic and Turkish people through 15 objects. It discusses the questions of periphery, borders, and the divide between agrarian, pastoral, and nomadic societies. The student will learn to derive historical questions and hypothesis through the intensive study of material culture, literature, and historical writing tracing the long and diverse history of the bow, the saddle, dumplings, and fermented milk (among others) across Eurasia.

HIST 106 302

TR | 1200PM-0130PM | MCNEIL CENTER FOR EARLY AMERI 105 Fulfills: Sector II: History & Tradition

Addiction: Understanding How We Get Hooked and How We Recover

James McKay, Professor of Psychology in Psychiatry

We will investigate the evolution of scientific theories and popular beliefs regarding the causes of addiction in the 20th and 21st centuries, and how they have shaped treatment approaches to these disorders. We will examine the crack cocaine epidemic of the 1980s and the current opioid epidemic, and consider sociocultural and political factors that contributed to the onset of and reaction to these crises. Finally, we will discuss research into the neurobiological, psychological, familial, social, and political factors that initiate and sustain addiction, and the efficacy of various treatment approaches.

HSOC 031 301

WF | 0200PM-0330PM | Fulfills: Sector IV: Humanities & Social Sciences

Medical Missionaries and Partners

Kent Bream, Assistant Professor of Clinical Family Medicine and Community Health

Global health is an increasingly popular goal for many modern leaders. Yet critics see evidence of a new imperialism in various aid programs. We will examine the evolution over time and place of programs designed to improve the health of underserved populations. Traditionally catergorized as public health programs or efforts to achieve a just society, these programs often produce results that are inconsistent with these goals. We will examine the benefits and risks of past programs and conceptualize future partnerships on both a local and global stage. Students should expect to question broadly held beliefs about the common good and service. Ultimately we will examine the concept of partnership and the notion of community health, in which ownership, control, and goals are shared between outside expert and inside community member.

HSOC 059 301

W | 0200PM-0500PM | HARNWELL COLLEGE HOUSE M10 Fulfills: Sector I: Society

Blood, Sweat and Pasta: Italian-american Literature

Frank Pellicone, House Dean of Harrison College House

This course traces the evolution of the Italian/American experience, from the shores of Italy, to American cities and firmly rooted in American suburbs. Through the literature of Italian-American authors we will consider the challenges and rewards of immigration, acculturation, and assimilation, not just for Italians, but for all immigrants coming to America. Works of Italian-American authors, such as: Pascal D'Angelo (*Son of Italy*), John Fante (*Ask The Dust*); Mario Puzo (*The Fortunate Pilgrim*); Pietro di Donato (*Christ in Concrete*); Jerre Mangione (*Mount Allegro*); Helen Barolini (*Umbertina*), Tina De Rosa (*Paper Fish*,) Francine Prose (*Household Saints*), Albert Innaurato (*Gemini*), and Tony Ardizzone (*In the Garden of Papa Santuzzu*.) will inform our discussions. In addition, works by Italian authors such as *Christ Stopped at Eboli* by Carlo Levi and short stories of Leonardo Sciascia, will help us understand the conditions that compelled so many individuals to leave their homes and the world that they knew. We will supplement readings and discussions with films and other media, when appropriate. We will also take a tour of Philadelphia's Italian market to help uncover the rich history of Italians in the City of Brotherly Love. First-year seminars can count toward the major and minor in Italian.

ITAL 100 401 | COML 107 401

TR | 0300PM-0430PM | HARRISON COLLEGE HOUSE M20 Fulfills: Sector III: Arts & Letters | Cross Cultural Analysis

Digital Science and Scholarship: Exploring Speech and Language

Mark Liberman, Christopher H. Browne Distinguished Professor of Linguistics

Today, research of all kinds is being extended, supplemented or replaced by computational analysis and modeling. This is happening in every field from archeology to zoology, in the humanities as well as in the natural and social sciences. And often, the phenomena of interest are viewed through the lens of language in digital form. This is directly true in literature, history, medicine, law, media studies, political science,

sociology, and anthropology, among others. Related or analogous methods are used in studies of animal communication, in the analysis of musical scores or recordings, and so on. In this seminar, we will learn about research at Penn and elsewhere based on a wide variety of digital language materials, including the texts of novels; poetry readings; student writing; political speeches; courtroom arguments; recordings of musical scores; cuneiform tablets; clinical interviews and neurocognitive tests; legal contracts; twitter and facebook; language learning; and even birdsong. And we will explore the foundational skills and methods that support research across all of these apparently diverse domains. We'll learn that the techniques used to analyze clinical interviews can be the same as those used to analyze poetry readings; insight into political speeches may come from the same methods used to analyze novels. Students with all backgrounds and interests are welcome. Priority in enrollment will be given to students in the Digital Humanities Program in Riepe College House and to students in the Research, Innovation and Entrepreneurship Program in Ware College House.

Fulfills: | Formal Reasoning & Analysis

Proving Things: Analysis

Florian Pop, Professor of 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 real and complex numbers, sequences, series, continuity, differentiability and integrability. 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. 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 real and complex numbers, sequences, series, continuity, differentiability and integrability. 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, reasoning, proofs and effective communication, while at the same time studying real and complex numbers, sequences, series, continuity, differentiability and integrability. 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. Students must enroll in both the seminar (MATH 202.301, shown below) and one of the labs (MATH 202.101 or 102) immediately below).

MATH 202.101 (lab) | T | 0630PM - 0830PM MATH 202.101 (lab) | R | 0630PM - 0830PM

MATH 202 301

MWF | 1100AM-1200PM | DAVID RITTENHOUSE LAB 3C4

Arts and Well-being

Carol Muller, Professor of Music

In this seminar we will discuss ideas about individual and collective well-being, we will read materials and watch documentaries about the work of the arts in supporting well-being both in our society and elsewhere in the world. We will also engage in a small community project in Philadelphia that implements the ideas we have read about and discussed in class.

MUSC 016 301

T | 0130PM-0430PM | LERNER CENTER (MUSIC BUILDING CONF Fulfills: Sector III: Arts & Letters

Music in Urban Spaces

Molly McGlone, Associate Director and Assistant Dean for Academic Affairs

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, sociologists and educators who work to define urban space and the role of music and sound in urban environments, including through music education. While the

readings make up our study of the sociology of urban space and the way we use music in everyday life to inform our conversations and the questions we ask, it is within the context of our personal experiences working with music programs at West Philadelphia High School or Henry C Lea Elementary, both inner city neighborhood schools serving economically disadvantaged students, that we will begin to formulate our theories of the contested musical micro-cultures of West Philadelphia. This course is over two-semesters where students register for .5 cus each term (for a total of 1 cu over the entire academic year) and is tied to the Music and Social Change Residential Program in Fisher Hassenfeld College House. All participants volunteer in music classrooms for about 3 hours per week, are expected to go to at least two concerts in the community during the year, attend the seminar weekly and complete all assignments.

For permission to enroll, send email to the instructor.

MUSC 018 401 | URBS 018 401

F | 0200PM-0400PM | GOLDBERG CH - FOERDERER BUILD 205 Fulfills: Sector IV: Humanities & Social Sciences | Cultural Diversity in the U.S.

The Middle East Through Many Lenses

Heather Sharkey, Associate Professor of Modern Islamic History

This first-year seminar introduces the contemporary Middle East by drawing upon cutting-edge studies written from a variety of disciplinary perspectives. These include history, political science, and anthropology, as well as studies of mass media, sexuality, religion, urban life, and the environment. We will spend the first few weeks of the semester surveying major trends in modern Middle Eastern history. We will spend subsequent weeks intensively discussing assigned readings along with documentary films that we will watch in class. The semester will leave students with both a foundation in Middle Eastern studies and a sense of current directions in the field.

NELC 036 401 | CIMS 036 401

M | 0200PM-0500PM |

Fulfills: Sector IV: Humanities & Social Sciences | Cross Cultural Analysis

Water in the Middle East Throughout History

Emily Hammer, Assistant Professor of Digital Humanities, Archeology and Anthropology of the Ancient World

Water scarcity is one of most important problems facing much of the Middle East and North Africa today. These are arid regions, but human and natural systems have interacted to determine relative water scarcity and abundance at different times and places. This course examines the distribution of water resources throughout the Middle East and the archaeology and anthropology of water exploitation and management over the last 9000 years, looking at continuities and changes through time. Students will learn to make basic digital maps representing Middle Eastern hydro-geography and arguments about modern and historic water resources in the region. The class will cooperatively play an "irrigation management game" designed to familiarize personnel involved in the operation of irrigation schemes with the logistical and social issues involved in water management. We will engage with a variety of media, including academic readings, popular journalism, films, satellite imagery, and digital maps, in our quest to explore whether or not the past can inform present efforts to better manage modern water resources. The course is structured in units focused on each of the major hydro-environmental zones of the Middle East: the river valleys of Mesopotamia, Egypt, and the Levant, the internal basins of western Central Asia and the Levant, the deserts of Arabia and North Africa, highland zones in Yemen and Iran, and coastal marsh areas along the Persian Gulf. We will examine irrigation systems, water supply systems, and ways of life surrounding water sources known from ethnographic studies, history, and archaeological excavations. These data will allow us to engage with debates in Middle Eastern anthropology, including those concerning the relationship between water and political power, the environment in which the world's earliest cities arose, and the relevance of "lessons of the past" for present and potential future water crises and "water wars." In our final weeks, we will discuss archaeology and historical anthropology's contribution to conceptions of water "sustainability"

and examine attempts to revive traditional/ancient technologies and attitudes about water. **NELC 111 401 | ANTH 110 401** TR | 1030AM-1200PM | CHEMISTRY BUILDING 119 **Fulfills:** Sector IV: Humanities & Social Sciences

Knowledge, Religion & Values

Kok-chor Tan, Professor of Philosophy

This First Year Undergraduate Seminar is an introduction to Philosophy organized around the topics of knowledge (epistemology), religion (metaphysics) and values (ethics). We will examine questions such as what is the difference between true knowledge and mere beliefs, the challenge of skepticism, the nature of the human mind, the nature of God and arguments for and against the existence of God, and ethical questions such as how should I live and what do I owe to others. We will draw on a range of philosophical writings, historical and contemporary, from different philosophical traditions. Examples of authors we will read include Plato, Descartes, Hume, Zhuangzi and Mengzi.

PHIL 011 301

MW | 0200PM-0330PM | COLLEGE HALL 311A Fulfills: Sector IV: Humanities & Social Sciences

Enhancing the Human Mind Through Technology

Gary Purpura, Executive Director for Education and Academic Planning, Office of the Provost Transhumanists seek to extend the capacities of the human mind beyond the bounds of the human brain and body through technology. Indeed, for them, such an extension of human thinking and feeling represents the next big step in human cognitive evolution. In this course, we will examine the philosophical conception of a mind that underpins this movement to extend the human mind beyond human biology. Through an examination of the hypothesis that there can be non-biological thinking and feeling, we consider whether technologies that enable or enhance human mental faculties might one day completely supplant the biological machinery of the human body. We will also consider the moral issues surrounding the creation of transhumans. The questions that we consider in this course will get to the heart of what it means to possess a human mind and indeed to be a human being.

PHIL 032 301

MW | 0430PM-0600PM | WILLIAMS HALL 318 Fulfills: Sector IV: Humanities & Social Sciences

Honors Physics I: Mechanics and Wave Motion

Charles Kane, Professor of Physics

This course parallels and extends the content of PHYS 150, at a significantly higher mathematical level. Recommended for well-prepared students in engineering and the physical sciences, and particularly for those planning to major in physics. Classical laws of motion: interaction between particles; conservation laws and symmetry principles; rigid body motion; non-inertial reference frames; oscillations. Credit is awarded for only one of the following courses: PHYS 008 PHYS 101, 150, or PHYS 170. Students with AP or Transfer Credit for PHYS 91 or PHYS 93 who complete PHYS 170 will thereby surrender the AP or Transfer Credit. Students must enroll in both the seminar (PHYS 170.301, shown below) and one of the labs (PHYS 170.102, 103, 104 immediately below).

PHYS 170.102 (lab) | T | 0300PM - 0500PM PHYS 170.103 (lab) | R | 0300PM - 0500PM PHYS 170.104 (lab) | W | 0300PM - 0500PM

PHYS 170 301 MWF | 1000AM-1100AM | DAVID RITTENHOUSE LAB A6 M | 0200PM-0300PM | DAVID RITTENHOUSE LAB A6 Fulfills: Sector VI: Physical World

Race, Class & Punishment

Marie Gottschalk, Professor of Political Science

This first-year seminar analyzes the politics of "crime in the streets" and "crime in the suites." Key topics include the causes and consequences of mass incarceration; the rise of the carceral state; racial, economic, and gender disparities in punishment; similarities and differences between how crime in the streets and crime in the suites are punished; the Great Recession; the opioid crisis; and environmental crimes and global warming.

PSCI 010 401 | AFRC 012 401

T | 0130PM-0430PM | VAN PELT LIBRARY 402 Fulfills: Sector I: Society | Cultural Diversity in the U.S.

Behind the Iron Curtain

Kristen Ghodsee, Professor of Russian and East European Studies

This first-year seminar provides an introduction to the histories, cultures, and societies of Central and Eastern Europe, including Poland, the Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Albania, and the successor states of Yugoslavia. Through a selection of articles and essays written by anthropologists and sociologists and based on their extended fieldwork in the region, students will explore both the ethnographic method and the experience of everyday life during and after the communist era. Topics will include: popular music under socialism, food and wine, environmental concerns, the status of Muslim minorities, socialist aesthetics, public memory and cultures of commemoration, privatization, advertising, women's rights, gender and sexuality, emergent nationalisms, and the rise of income inequality and homelessness. All readings and assignments in English.

RUSS 026 401 | ANTH 026 401 | EEUR 026 401 TR | 0130PM-0300PM | DAVID RITTENHOUSE LAB 2C4 Fulfills: Sector I: Society | Cross Cultural Analysis

Planning to Be Offshore

Srilata Gangulee, Assistant Dean for Academic Advising

In this seminar we will trace the economic development of India from 1947 to the present. Independent India started out as a centrally planned economy in 1949 but in 1991 decided to reduce its public sector and allow, indeed encourage, foreign investors to come in. The Planning Commission of India still exists but has lost much of its power. Many in the U.S. complain of American jobs draining off to India, call centers in India taking care of American customer complaints, American patient histories being documented in India, etc. At the same time, the U.S. government encourages highly trained Indians to be in the U.S. Students are expected to write four one-page response papers and one final paper. Twenty percent of the final grade will be based on class participation, 20 percent on the four response papers and 60 percent on the final paper. **SAST 057 301**

TR | 1200PM-0130PM | PSYCHOLOGY LAB C41 Fulfills: Sector I: Society

Poverty and Inequality

Regina Baker, Assistant Professor in Sociology

What does it mean to live in poverty in the "land of plenty" and experience inequality in the "land of opportunity?" This First-Year Seminar explores these questions and others related to poverty and inequality in contemporary America. The first part of this course focuses on poverty. We will examine topics such as poverty perceptions and measurement, poverty trends, causes of poverty, poverty-related outcomes, and anti-poverty policy. The second part of this course focuses on inequality more broadly. We will examine how inequality is defined and what it looks like in the U.S. We will compare the "Haves" and the "Have Nots" and discuss social class, mobility, wealth, and privilege. Lastly, we will explore how different domains (e.g. education, the labor market, health, the justice system) produce, maintain, and reproduce inequalities. Throughout the semester, we will consider the roles of race/ethnicity, gender, age, and place, and how they help deepen our understanding of poverty and inequality.

SOCI 041 301

MW | 0200PM-0330PM | DAVID RITTENHOUSE LAB 2C8 **Fulfills:** Sector I: Society | Cultural Diversity in the U.S.

Social Inequality & Health

Courtney Boen, Assistant Professor of Sociology

Eat well. Exercise regularly. Get 7-9 hours of sleep. We have all been bombarded with this type of advice for achieving and maintaining optimal health. But how are our health behaviors and outcomes shaped, influenced, and constrained by social factors? How does where we live influence how-and how long-we live? And how do racism, gender inequality, and other forms of social exclusion, oppression, and domination impact health and well-being? This course provides an introduction into how social forces, broadly, and social inequality, specifically, impact individual and population health. We will begin by learning about how health is more than the product of individual lifestyle choices and genetic factors by exploring the social determinants of health. We will then examine how social inequality—particularly along lines of race, immigration status, social class, and gender—contributes to population health differences. We will analyze how racism, gender inequality, and other forms of social stratification both shape access to health promoting resources and opportunities such as well-paying jobs and healthy and affordable foods and also pattern exposure to harmful stressors and toxins such as discrimination and violence. Finally, we will discuss and debate policy and programmatic approaches aimed at reducing population health disparities. In this course, we will examine concepts related social inequality and health through a process called "active learning," which involves activities such as watching and reacting to films, reading about and responding to current events, and active dialogues and debates with classmates.

SOCI 041 302

W | 0200PM-0500PM |

Fulfills: Sector I: Society | Cultural Diversity in the U.S.

The Future of Work

Benjamin Shestakofsky, Assistant Professor of Sociology

This course draws on sociological and social scientific research and theorizing to conceptualize the complex and dynamic relationship between work and technology. Rather than viewing technology as an immutable force that sweeps across societies and leaves social change in its wake, we will examine how the design, implementation, and outcomes of technological change are imbricated in political, economic, and social forces. We will mostly, though not exclusively, focus on developments in and case studies of work and technology in the United States. We will begin by examining theoretical perspectives on the historical interplay between work and technology. Then, we will consider contemporary issues, building dialogues between our theoretical groundwork and empirical evidence to trace continuities and disjunctures. By the end of the course, you will be equipped to interrogate the role of technology in capitalism's past, understand its relation to our present age of digital disruption, and imagine the possibilities for our uncertain future. **SOCI 041 303**

W | 0200PM-0500PM | MEYERSON HALL B4 Fulfills: Sector I: Society

Environment & Society

Daniel Cohen, Assistant Professor of Sociology

This first-year seminar will introduce students to a range of novel social perspectives on the contemporary global environmental crisis that is usually represented in strictly scientific terms or according to clichés about environmentalists, grouped into four themes. First, we will emphasize the fundamentally global nature of environmental problems like greenhouse gases and water scarcity. Second, we will explore the rich analogies between human and non-human consciousness, and how the relationship between humans and non-humans varies across time and space. Third, we will explore new thinking on environmental inequality, which explores the subtle ways in which all social groups both make and suffer the global environment in distinctive ways. Fourth, against the intuitive despair that global environmental crisis is too great for any of

us to have any positive impact, we will explore the surprising ways in which motivated individuals, working together, can do more than ever to help alleviate our ecological crises.

SOCI 041 304 TR | 0300PM-0430PM |

Fulfills: Sector I: Society

East Asian Societies

Hyunjoon Park, Professor of Sociology

There are several stereotypes on East Asia: strong family ties, extreme emphasis on children's educational success, and population homogeneity are just a few examples of those stereotypes. In this first-year seminar, students are exposed to social science studies of East Asian societies that challenge those stereotypes. In particular, we discuss how sociological lens can help move beyond the stereotypes to identify 'real' challenges and issues that contemporary East Asian societies are facing. This course demystifies major stereotypes on East Asian societies by focusing on issues related to how young people in East Asia are coming of age nowadays.

SOCI 041 305

W | 0200PM-0500PM |

Fulfills: Sector I: Society | Cross Cultural Analysis

Diversity, Technology and the Penn Experience

Janice Curington, Assistant Dean for Multicultural Affairs and Advising

Penn is diverse in many ways. Let us explore this diversity together and understand its subtleties. How has the word "diversity" evolved over the years? Why is it (at times) such a loaded concept? When, where and how does diversity change within various contexts? What does the concept mean in a university context? How might it change in the future? We will explore different constructions of diversity at Penn. Have new technologies changed the ways in which we perceive culture, communicate and share ideas? Increasingly, we construct notions of ourselves and of others using video and social media in addition to personal experiences. How do such technologies define who we are, and the boundaries we draw to define "us" and "them"? Do sub-cultures thrive now in new ways? How does each student's journey to Penn bring in new perspectives on the university? Reflections on personal experiences in the context of theories (cultural capital, social capital) will be a core part of this seminar. Readings and research assignments are interdisciplinary and will require critical analysis of both classic and contemporary perspectives. In addition to other assignments, small weekly response papers are due before each class meeting to encourage engaged discussions.

SOCI 041 306

MW | 0200PM-0330PM | VAN PELT LIBRARY 124 **Fulfills:** Sector I: Society | Cultural Diversity in the U.S.

Homelessness & Urban Inequality

Dennis Culhane, Professor of Social Policy

This first-year seminar examines the homelessness problem from a variety of scientific and policy perspectives. Contemporary homelessness differs significantly from related conditions of destitute poverty during other eras of our nation's history. Advocates, researchers and policymakers have all played key roles in defining the current problem, measuring its prevalence, and designing interventions to reduce it. The first section of this course examines the definitional and measurement issues, and how they affect our understanding of the scale and composition of the problem. Explanations for homelessness have also been varied, and the second part of the course focuses on examining the merits of some of those explanations, and in particular, the role of the affordable housing crisis. The third section of the course focuses on the dynamics of homelessness, with quantitative research on the patterns of entry and exit from the condition. The final section of the course turns to the approaches taken by policymakers and advocates to address the problem, and considers the efficacy and quandaries associated with various policy strategies. The course

concludes by contemplating the future of homelessness research and public policy.

URBS 010 401 | AFRC 041 401 | SOCI 013 401

F | 0200PM-0500PM | WILLIAMS HALL 316 Fulfills: Sector I: Society | Cultural Diversity in the U.S.

Vagelos Integrated Program in Energy Research Seminar II

Andrew Rappe, Professor of Chemistry, John Vohs, Professor of Chemical and Biomolecular Engineering This is the second part of the two-semester seminar designed to introduce students to the VIPER program and help them prepare for energy-related research. In this semester we will continue to discuss research articles on various energy-related topics, best practices for library research, presentation of data, basic research methods, research ethics, data analysis, and funding options. A large focus of the course will also be on presenting (in both written and oral form) the work from the students' summer research internships. **VIPR 121 301**

W | 0900AM-1000AM | CHEMISTRY BUILDING 514