# Freshman Seminars

**FALL 2014** 

## **Sector I - Society**

#### **Desire and Demand**

## Marilynne Diggs-Thompson, House Dean, Riepe College House

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?

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

## **Euro Zone Crisis - The EU in a Currency War for Survival?**

## Susanne Shields, Lauder Institute, Senior Lecturer

"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.

GRMN 027 301

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

## **Digital Footprints**

### Yasemin Dayioglu-Yucel, Visiting Professor, German Academic Exchange Service

The so called digital revolution has changed our lives profoundly. It has created new ways of communicating, socializing, archiving and researching as well as new art forms and new metaphors such as digital citizenship and digital footprint. In this seminar, we will engage with these concepts in various ways: We will look at new art forms like video adaptations and art created with blogs and explore how our engagement with literature and the accessibility of literature has changed. We will ask how students' lives and universities as a whole change through the use of digital media and how the buzzword "digital humanities" relates to that. Last but not least, we will also investigate our own traces in the world wide web and our roles as producers in participatory media.

GRMN 029 301

Monday, Wednesday, and Friday | 10:00 a.m. to 11:00 a.m.

## **Risky Business**

### J. Sanford Schwartz, Professor of Medicine, Health Management & Economics

This freshman seminar on medical decision-making will focus on personal and public medical and health decisions - how we make them and how they can be improved. While in theory medical decisions are in large part both informed and constrained by scientific evidence, in reality they are much more complex. Drawing upon a range of information sources including textbooks, original research and popular media, the seminar will introduce students to the challenges of making personal and public (i.e., policy) decisions under conditions of inherent uncertainty and resources constraints and how research and scholarship can inform and improve decision-making processes and decisions. Using a variety of highly engaging approaches (in-class discussions, examination of primary research, popular media, simple experiments, expert panel debates) this highly interactive seminar will provide students a strong introductory foundation to medical decision-making specifically and, by extension, to decision making under conditions of uncertainty more generally. The seminar will take a multi-disciplinary perspective, drawing upon knowledge developed from psychology, sociology, economics, insurance and risk management, statistical inference, neuroscience, operations research, communications, law, ethics and political science.

HSOC 032 301

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

## **Autism Epidemic**

## David Mandell, Associate Professor of Psychiatry and Pediatrics, School of Medicine

The CDC estimates that 1 in 150 children have autism. Three decades ago, this number was 1 in 5,000. The communities in which these children are identified in ever increasing numbers are ill prepared to meet their needs. Scientists have struggled to understand the causes of this disorder, its treatment, and why it appears to be rapidly increasing. Families, policy makers, schools and the healthcare system have argued bitterly in the press and in the courts about the best way to care for these children and the best ways to pay for this care. In this class, we will use autism as a case study to understand how psychiatric and developmental disorders of childhood come to be defined over time, their biological and environmental causes identified, and treatments developed. We will also discuss the identification and care of these children in the broader context of the American education and healthcare systems.

HSOC 052 301

Tuesday and Thursday | 9:00 a.m. to 10:30 a.m.

## **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 categorized 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

Wednesday | 2:00 p.m. to 5:00 p.m.

#### **Ethics**

## Milton W. Meyer, Lecturer in Philosophy

Three sorts of questions belong to the philosophical study of ethics:

- (a) Practical ethics discusses specific moral problems, often those we find most contested (e.g., abortion, euthanasia, killing noncombatants in war).
- (b) Ethical theory tries to develop systematic answers to moral problems, often by looking for general principles that explain moral judgments and rules (e.g., consequentialism, contractarianism).
- (c) Meta-ethics investigates questions about the nature of moral theories and their subject matter (e.g., are they subjective or objective, relative or non-relative?).

We will rigorously investigate all three of these types of questions. A large part of the course will be focused on two highly contentious moral problems, abortion and killing noncombatants in war.

The central aim of the required readings and discussion is a) to develop each question deeply and sharply enough for us to understand why it has been contentious; b) to see what new evidence could change the nature of the problem; and c) to suggest how to seek that further evidence. We will focus on how to read complex contemporary philosophical prose in order to outline and evaluate the arguments embedded with it. This will provide the basis for writing papers in which you defend a position with evidence and arguments.

These skills are central to the practice of Philosophy. This course does not presuppose that students already have these skills. It is intended to teach them and presupposes a willingness on the part of students to do what is necessary to learn them. What this involves is detailed in a note on Penn in Touch called "Success in the Course". You should read this note before deciding to enroll in the course so that you understand the commitments this course involves.

Graded work: weekly paragraphs on a topic of your choice; three papers in multiple drafts; take-home final exam; class participation.

PHIL 002 301

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

## Race, Crime & Punishment

### Marie Gottschalk, Professor of Political Science

Why are African-Americans and members of other historically disadvantaged groups disproportionately incarcerated and subjected to other penal sanctions in the United States? What are the political, social, and economic consequences for individuals, communities, and the wider society of mass incarceration in the United States? What types of reforms of the criminal justice system are desirable and possible?

This freshman seminar analyzes the connection between race, crime, punishment, and politics in the United States. The primary focus is on the role of race in explaining why the country's prison population has exploded since the early 1970s and why the United States today has the highest incarceration rate in the world.

The class will likely take field trips to a maximum-security jail in Philadelphia and to a state prison in the Philadelphia suburbs.

Cultural Diversity in the U.S. PSCI 010 401 AFRC 010 401 Thursday | 1:30 p.m. to 4:30 p.m.

### **Planning to Be Offshore?**

## Srilata Gangulee, Assistant Dean for Academic Advising

In this course 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.

SAST 057 301

Tuesday and Thursday | 12:00 p.m. to 1:30 p.m.

### Diversity, Technology and the Penn Experience

## Janice Curington, Assistant Dean for Academic 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.

Cultural Diversity in the U.S.

SOCI 041 302

Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

## **Homelessness & Urban Inequality**

## **Dennis Culhane**, Professor of Social Policy and Practice

This freshman 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, combining evidence from ethnographic studies of how people become homeless and experience 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.

Cultural Diversity in the U.S.

URBS 010 401 AFRC 041 401 SOCI 041 401

Friday | 2:00 p.m. to 5:00 p.m.

## Sector II - History & Tradition

#### Food and Fire: Archaeology in the Laboratory

### Katherine M. Moore, Adjunct Associate Professor Anthropology

This freshman seminar will let students explore the essential heritage of human technology through archaeology. People have been transforming their environment from the first use of fire for cooking. Since then, humans have adapted to the world they created using the resources around them. We use artifacts to understand how the archaeological record can be used to trace breakthroughs such as breaking stone and bone, baking bread, weaving cloth and firing pottery and metals. The seminar will meet in the Penn Museum's new Center for the Analysis of Archaeological Materials. Students will become familiar with the Museum's collections and the scientific methods used to study different materials. Class sessions will include discussions, guest presentations, museum field trips, and hands-on experience in the laboratory. See video description.

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

ANTH 148 401 CLST 148 401 Monday | 2:00 p.m. to 5:00 p.m.

## From Alchemy to Nanoscience

### **Jeffrey Winkler**, Professor of Chemistry

The imperative to transform matter, find its roots in the alchemy and the search for the Philosopher's Stone, which was thought to contain the secret of turning base metals into gold and also the secret of immortality. We will examine the evolution of the way in which people have thought about matter and its transformations; from the manufacturing of explosives, to the dyestuffs, to pharmaceuticals and perfumes. We will do some simple experiments that demonstrate some of these principles. We will follow the development of the chemical sciences from the works of early alchemists to Renaissance (Newtown and Boyle) scientists and modern thinkers (Priestly, Lavoisier, Dalton, Mendeleev and others). This class, which is designed for non-science as well as potential science majors, will involve discussions on readings, as well as field trips to some Philadelphia locations that are notable in the history of chemistry.

CHEM 025 301 Wednesday | 2:00 p.m. to 5:00 p.m.

## Russia in the Age of Anna Karenina

### Peter Holquist, Associate Professor of History

Leo Tolstoy's Anna Karenina is an epic tale of passion, intrigue, tragedy and redemption. It is also a penetrating portrayal of Russian life and society in the period following the Great Reforms of the 1860s. This period, the third quarter of the nineteenth century, was both the time of the flowering of the Russian novel as well as the age of Russia's imperial glory. In this course we will use Anna Karenina as the starting point for a multifaceted exploration of nineteenth century Russian history and culture. Among the topics we will discuss are family life, social relations, modernization and industrialization, gender and sexuality, revolutionary movements, imperialism, and political power. We will enhance our reading of the novel with a wide range of supplementary materials including memoirs, travel accounts, historical analysis, and art. This course will be organized in a seminar format. No prior knowledge of Russian history or literature is required. All readings are in English.

Cross-Cultural Analysis
HIST 102 301
Tuesday and Thursday | 10:30 a.m. to 12:00 p.m.

### **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.

Cross-Cultural Analysis
HIST 106 301
Monday and Wednesday | 3:30 p.m. to 5:00 p.m.

## **Proto-Indo-European Language and Society**

#### **Rolf Noyer**, Associate Professor of Linguistics

Most of the languages now spoken in Europe, along with some languages of Iran, India and central Asia, are thought to be descended from a single language known as Proto-Indo-European, spoken at least six thousand years ago, probably in a region extending from north of the Black Sea in modern Ukraine east through southern Russia. Speakers of Proto-Indo-European eventually populated Europe in the Bronze Age, and their societies formed the basis of the classical civilizations of Greece and Rome, as well as of the Celtic, Germanic and Slavic speaking peoples. What were the Proto-Indo-Europeans like? What did they believe about the world and their gods? How do we know? Reconstruction of the Proto-Indo-European language, one of the triumphs of comparative and historical linguistics in the 19th and 20th centuries, allows us a glimpse into the society of this prehistoric people.

In this seminar students will, through comparison of modern and ancient languages, learn the basis of this reconstruction -- the comparative method of historical linguistics -- as well as explore the culture and society of the Proto-Indo-Europeans and their immediate descendants. In addition, we will examine the pseudo-scientific basis of the myth of Aryan supremacy, and study the contributions of archaeological findings in determining the "homeland" of the Indo-Europeans. No prior knowledge of any particular language is necessary. This seminar should be of interest to students considering a major in linguistics, anthropology and archaeology, ancient history or comparative religion.

Cross-Cultural Analysis
LING 051 301
Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

### Penn/Phila/Middle East

## Heather Sharkey, Associate Professor of Near Eastern Languages & Civilizations

This seminar explores the historic engagement of the University of Pennsylvania and its faculty, students, and graduates in the Near and Middle East. It does so while drawing on archives, rare books and manuscripts, and artifacts that are now preserved in the University Archives, the Penn Museum, and the Penn Libraries. Together we will consider how, beginning in the late nineteenth century, Penn scholars engaged in archaeological expeditions to celebrated sites like Ur (in what is now Iraq) and Memphis (in Egypt) – and how some of these efforts influenced the late Ottoman Empire's policies towards antiquities and museums. We will examine how Penn's curriculum changed over time to accommodate "Semitics", including the study of languages and biblical traditions, in light of – or in spite of – historic tensions at the university between secular and religious learning. We will assess how Penn responded to changing American popular attitudes and U.S. foreign policy concerns relative to the Middle East, including during the Cold War and post-2001 ("post-9/11") eras. Finally, we will trace the stories or "biographies" of some individual objects in Penn collections in order to appreciate the university's roles in collecting, preserving, analyzing, and disseminating knowledge about the region's deep cultural heritage. Ultimately, by investigating and writing about what we learn, our goal in the class will be to produce collaborative research on the history of "here" – the very local context of Penn and its environs – as it has tied into the history of the "over there" in the modern Middle East. See video description.

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

NELC 133 301

Tuesday | 1:30 p.m. to 4:30 p.m.

## Sector III - Arts & Letters

## Arts at Penn: The Afterlife of Things

## Robert Ousterhout, Professor of History of Art

Starting with the Penn Museum and the Philadelphia Museum of Art, the seminar will visit major collections of Philadelphia, both to examine the works of art and artifacts (on display and in storage) and to meet with directors, curators, keepers, and collectors. Most meetings will take place in the museums, not in the classroom. While the seminar will provide an overview of the history of art, our discussions on site will focus on changing aesthetics and collecting practices, aspects of display and contextualization, the institution of the museum, thing theory, and the blurred boundaries between ethnography, archaeology, and art history. Students will be expected to participate actively in the discussions and to prepare two written essays (one submitted at midterm, one presented orally at the end of term). See video description.

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

ARTH 100 301

Thursday | 1:30 p.m. to 4:30 p.m.

## Modern Sci-Fi Cinema

## Christopher Donovan, House Dean, Gregory College House

Science Fiction has been a cinematic genre for as long as there has been cinema—at least since Georges Melies's visionary *Trip to the Moon* in 1902. However, though science fiction films have long been reliable box office earners and cult phenomena, critical acknowledgement and analysis was slow to develop. Still, few genres reflect the

sensibility of their age so transparently—if often unconsciously—or provide so many opportunities for filmmakers to simultaneously address social issues and expand the lexicon with new technologies. Given budgetary considerations and the appetite for franchises, science fiction auteurs face a difficult negotiation between artistic expression and lowest common denominator imperatives, the controversy over Terry Gilliam's *Brazil* (1985) being perhaps the most infamous example. Nevertheless, many notable filmmakers have done their most perceptive and influential work in the scifi realm, including Gilliam, Ridley Scott, Steven Spielberg, David Cronenberg, James Cameron and Paul Verhoeven. This course will survey the scope of modern science fiction cinema, beginning with two films that inspired a rare wave of academic discourse, Scott's *Alien* (1979) and *Blade Runner* (1982), which attracted postmodernists, feminists, and film historians interested in how the works both drew from earlier movements (German Expressionism, Noir), and inspired new ones (Cyberpunk). We will look at smaller, more independent-minded projects, such as Michel Gondry's *Eternal Sunshine of the Spotless Mind* (2004) and Duncan Jones' *Moon* (2009) as well as risky, massively budgeted epics such as Spielberg's AI: Artificial Intelligence (2001) and Christopher Nolan's Inception (2010).

CIMS 016 301

Monday and Wednesday | 3:00 p.m. to 4:30 p.m.

#### **Inescapable Classics**

### Ralph Rosen, Professor of Classical Studies

The legacy of Greco-Roman traditions in Western culture is everywhere apparent. Whether in the realm of political or legal systems, philosophical and scientific discourse, mythological dreamscapes, psychology, literary genre or aesthetic theory, the contribution of Greek and Roman culture is routinely invoked—sometimes to admire, other times to lament. It forms a highly complex narrative of reception and influence, shaped by historical contingencies, individual talents and temperaments, and continually shifting conceptions of what these contributions actually were. This seminar will trace the evolution of the 'Classical tradition,' in all its varied and inconsistent manifestations, primarily through the visual arts. It will be a museum-based course, organized around four important Philadelphia museums or collections: (1) The Penn Museum (for ancient artifacts), (2) Penn's manuscript collection within Van Pelt Special Collections (where we will examine original manuscripts of the Medieval and Renaissance periods that transmit Classical culture), (3) The Philadelphia Museum of Art, and (4) The Pennsylvania Academy of the Fine Arts, both of which house many examples of painting and sculpture deeply informed by the Classical tradition. See video description.

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

CLST 006 301

Tuesday | 1:30 p.m. to 4:30 p.m.

### **Monsters of Japan**

### Frank L Chance, Adjunct Associate Professor of East Asian Languages and Civilizations

Godzilla! Mothra! Rodan! Totoro! Pikachu! If you know who they are, join us to discover the deeper meanings of monstrosity in Japan. If you don't know who they are, learn the literal, metaphorical, and cinematic implications of these giant (and not so giant) beasts. Watch Tokyo go down in flames, and discuss what that means for New York and Philadelphia! Explore the history, literature, and films of Japanese monsters in this undergraduate seminar. Attendance at the film series is required.

Cross-Cultural Analysis
EALC 055 401 CIMS 016 401
Tuesday | 3:00 p.m. to 6:00 p.m.

## **Nineteenth-Century New York City in Literature**

### Nancy Bentley, Professor of English

This seminar will examine the concept of "modernity" by exploring the way nineteenth century authors wrote about New York City. How did literature capture distinctive kinds of new experience and perception? We will be exploring changes in interiority and feeling (the experience of walking city streets, the desire to go shopping, new sensations in speed, time, and place, new forms of social belonging) as well as examining the transformation of large social systems (global immigration and travel, the emergence of mass culture, the redefining of kinship and family, the importance of ethnic and sexual subcultures). A field trip or optional research trip to New York may be part of the course.

The syllabus will include some sociological texts on the category of modernity. Literary works may include: Edgar Allan Poe stories; Walt Whitman, Leaves of Grass; Herman Melville, "Bartleby the Scrivener"; Jose Martî, from Our America; Theodore Dreiser, Sister Carrie; Abraham Cahan, "Yekl," Stephen Crane, New York Sketches; Edith Wharton, The House of Mirth; James Weldon Johnson, Autobiography of an Ex-Colored Man.

ENGL 016 301

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

### **Writing About Art**

### Susan Bee Laufer, Lecturer, Creative Writing Program

The seminar will engage critical issues related to visual arts, with a focus on writing about contemporary exhibitions. Most weeks there will be both a writing assignment and suggested reading. Members of the seminar will visit and review Philadelphia area exhibitions, including shows at the Institute for Contemporary Art, the Philadelphia Museum of Art, and local galleries. In the seminar, students will be able to practice different descriptive and critical approaches to writing about art works. We will also focus on editing and the role of the editor in creating the final written work. There will be ample time given to discuss a wide range of contemporary visual art. See video description.

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

ENGL 016 302

Wednesday | 2:00 p.m. to 5:00 p.m.

## Early African American Literature: Freedom, Fugitivity, and Servitude in the Atlantic World

## David Kazanjian, Associate Professor of English

This course will consider writings about freedom, fugitivity, and servitude in North America during the seventeenth, eighteenth, and nineteenth centuries, with a primary focus on Black literature. We will read court cases, poetry, black mariner narratives, slave narratives, political pamphlets, and novels. In addition, we will read current literary and cultural theory about how the era and experience of transatlantic chattel slavery generated a profound body of work on what it might mean to live a free life, work that still speaks to our own futures.

ENGL 016 402 AFRC 017 402

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

## The Fantastic Voyage from Homer to Science Fiction

## Scott Francis, Assistant Professor of French Studies

Tales of voyages to strange lands with strange inhabitants and even stranger customs have been a part of the Western literary tradition from its inception. What connects these tales is that their voyages are not only voyages of discovery, but voyages of self-discovery. By describing the effects these voyages have on the characters who undertake them, and by hinting at comparisons between the lands described in the story and their own society, authors use fantastic voyages as vehicles for incisive commentary on literary, social, political, and scientific issues.

In this course, we will explore the tradition of the fantastic voyage from *Homer's Odyssey*, one of the earliest examples of this type of narrative and a model for countless subsequent voyage narratives, to science fiction, which appropriates this narrative for its own ends. We will determine what the common stylistic elements of voyage narratives are, such as the frame narrative, or story-within-a-story, and what purpose they serve in conveying the tale's messages. We will see how voyagers attempt to understand and interact with the lands and peoples they encounter, and what these attempts tell us about both the voyagers and their newly-discovered counterparts. Finally, we will ask ourselves what real-world issues are commented upon by these narratives, what lessons the narratives have to teach about them, and how they impart these lessons to the reader.

Readings for this course, all of which are in English or English translation, range from classics like *The Odyssey* and *Gulliver's Travels* to predecessors of modern science fiction like Jules Verne and H. G. Wells to seminal works of modern science fiction like Pierre Boulle's *Planet of the Apes*, Karel Čapek's *War with the Newts*, and Stanislaw Lem's *Solaris*. Though this course is primarily dedicated to literature, we will also look at how films like the 1968 adaptation of *Planet of the Apes* and television shows like *Star Trek*, *Red Dwarf*, and *Futurama* draw upon literary or cinematic models for their own purposes.

This course is meant not only for SF fans who would like to become better acquainted with the precursors and classics of the genre, but for all those who wish to learn how great works of fiction, far from being intended solely for entertainment and escapism, attempt to improve upon the real world through the effect they have on the reader.

FREN 200 401 COML 200 401 Tuesday and Thursday | 1:30 p.m. to 3:00 p.m.

## Feith Family Seminar: Thomas Mann, Nazi Germany, and the Joseph Novels

#### Simon Richter, Professor of Germanic Languages and Literatures

The year is 1933. Hitler and the Nazis have assumed power in Germany. As the Nobel-Prize-winning author Thomas Mann, famous for his novels *The Buddenbrooks* and *The Magic Mountain*, and his Jewish wife Katia go into exile in various European countries and eventually the United States (Princeton and Los Angeles), the first of his four novels about Joseph, the son of Jacob and provider for the Jews in Egypt, is published. Mann would go on to write three novels about Joseph and his brothers, completing the tetralogy in 1943. In this course we will discuss the novels against their complex cultural background. How does Mann get from 13 chapters in the *Book of Genesis* and a trip to Palestine to a monumental work of literature, which he considered his most important and which sustained him throughout his exile? How does this elaborate and provocative work of historical fiction comment on the geopolitical situation of his own time, not only the horrors of the Third Reich, but also Franklin Roosevelt and the politics of the New Deal, in which Mann recognized the good government of Joseph of Egypt? We'll test the idea that Mann regarded the Joseph story as an alternative cultural epic to the Nordic sagas favored by Richard Wagner in *The Ring of the Nibelungen*, often regarded as a source for Tolkien's *Lord of the Rings*.

GRMN 025 301

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

## Italy: From the Grand Tour to Contemporary English Fiction and Film

## Marina Johnston, Lecturer in a Foreign Language

The course will take students on a virtual Grand Tour of Italy, which we will explore reading travel journals, letters, works of fiction in print and film, as well as through the analysis of works of art and souvenirs from the Italian travels of English speaking tourists and authors. We will take off following in the footsteps of Thomas Jefferson and Rembrandt Peale, Mary Louise Alcott, Mark Twain and Edith Wharton, to arrive at the Italy of Frances Mayes, Dan Brown, and Salman Rushdie. Visually, we will travel through movies from *The Black Hand* (Wallace McCutcheon, 1906) to *Summertime* (David Lean, 1955) and *My Voyage to Italy* (Martin Scorsese, 2001), with an eye also to reality and

cooking shows for television.

ITAL 100 401 COML 107 401 Monday, Wednesday, and Friday | 1:00 p.m. to 2:00 p.m.

#### **Hearing Africa: Old and New Diasporas**

### Carol Muller, Professor of Music

Using live and recorded performance as the starting point, this seminar will examine the relationship between contemporary Africa and its diasporas through musical performance. Students will engage with ideas about the old (as shaped by slavery) and new (shaped by colonialism, globalization, migration) African diasporas by reading current literature, listening to pieces of the recorded archive, hearing from musicians, attending live performances on campus and in the city of Philadelphia, and writing about them. Will have ABCS component.

## Students must be available for five evening performances. See video description.

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

Cross-Cultural Analysis

MUSC 016 401 AFRC 016 401 AFST 016 401 COML 015 401

Tuesday and Thursday | 12:00 p.m. to 1:30 p.m.

#### Saints and Devils in Russian Literature and Tradition

#### Julia Verkholantsev, Assistant Professor of Slavic Languages & Literatures

This course is about Russian literature, which is populated with saints and devils, believers and religious rebels, holy men and sinners. In Russia, where people's frame of mind had been formed by a mix of Eastern Orthodox Christianity and earlier folk beliefs, the quest for faith, spirituality and the meaning of life has invariably been connected with religious matters. How can one find the right path in life? Is humility the way to salvation? Should one live for God or for the people? Does God even exist?

In "Saints and Devils," we will examine Russian literature concerning the holy and the demonic as representations of good and evil, and we will learn about the historic trends that have filled Russia's national character with religious and supernatural spirit. In the course of this semester we will talk about ancient cultural traditions, remarkable works of art and the great artists who created them. All readings and films are in English. Our primary focus will be on works by Pushkin, Gogol, Lermontov, Dostoevsky, Chekhov, Tolstoy, and Bulgakov.

## Cross-Cultural Analysis

RUSS 213 401 COML 213 401 RELS 218 401 Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

## Theatre in Philadelphia

### Rose Malague, Senior Lecturer in Theatre Arts

The focus of this course will be on investigating and experiencing live theatre in Philadelphia. This semester we will have the opportunity to see numerous plays in production. We will examine the theatre experience in its entirety, considering: place and space of performance; audience; production elements such as directing, acting, and scenic design; as well as the play or performance piece itself. In addition, we will examine the state of the contemporary theatre culture of Philadelphia by looking at: the history of theatre in the city; the theatre buildings themselves; as well as the history, mission, and current state of selected theatre companies. Our readings will include: historical and theoretical context for attending the theatre and viewing plays in production; scripts for plays we will see; and local newspaper coverage of the Philadelphia theatre scene. The course will also include tours of local theatres as well as

discussions with local and visiting theatre artists. See video description.

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

THAR 076 301

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

### Sector IV - Humanities & Social Sciences

#### **Architecture in the Anthropocene**

## Daniel Barber, Assistant Professor of Architecture

In February 2008, the Stratigraphy Commission of the Geological Society of London announced that civilization has entered a new era. The anthropocene, they indicated, is an Earth epoch defined by the emergence of urban-industrial society as a geophysical force – not only impacting natural resources and the experience of nature, but also intervening, albeit mostly unwittingly, in the complex atmospheric and oceanographic systems that allow for human life to persist on the planet. The environmental threats we now face are being productively engaged by the natural and social sciences. The role of the humanities has also recently come to the fore. Humanistic research has the potential to play a vital role in fostering social awareness and informed decision-making with regard to our endangered environment.

This course will use architecture as a lens to investigate the emerging field of the environmental humanities. We will analyze these intellectual frameworks in order to consider the relationship between global environmental challenges and the processes of constructing the built environment. We will explore social and political theory, environmental history, and architectural history and theory. Issues of importance will include: theories of risk, the role of nature in political conflicts; design and environmental communication; and the role of speculative images.

Students will be expected to read all material closely and critically, and to write a short reading response for each assigned reading. There will be a mid-term assignment involving a profile of an environmentally engaged architectural firm, and a final paper expanding on issues that emerge from the mid-term and course discussions.

ARCH 111 301

Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

## **Katharine Hepburn Films**

## Suhnne Ahn, House Dean, Harnwell College House

Ranked by the American Film Institute (AFI) as the "greatest female star in the history of American cinema," Katharine Hepburn (1907-2003) lived as originally as so many of the heroines she depicted in her movies. This seminar examines a corpus of films and roles that defined the pioneering Hepburn as an actress, a businesswoman, and progressive thinker. This course will also analyze critical and audience reception to gain familiarity with the historical context in which these films premiered throughout the decades. Hepburn's career will therefore serve as a prism through which students will discuss issues such as the Hollywood studio system, the McCarthy era, the rise of the television industry, the changing role of women in the 20th century, and civil rights in the U.S. Why was Katharine Hepburn considered so unconventional, outspoken, and defiant during her own time? How was she able to ensure her inimitable and enduring legacy? Included in this course will be a field trip to the Katharine Houghton Hepburn Center at Bryn Mawr College in conjunction with activities from Harnwell College House's ArtsHouse Residential Program.

CIMS 015 301

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

#### **Copyright and Culture**

### Peter Decherney, Professor of English and Cinema Studies

In this course, we will look at the history of copyright law and explore the ways that copyright has both responded to new media and driven art and entertainment. How, for example, is a new medium (photography, film, the Internet, etc.) defined in relation to existing media? What constitutes originality in collage painting, hip hop music, or computer software? What are the limits of fair use? And how have artists, engineers and creative industries responded to various changes in copyright law? A major focus of the course will be the lessons of history for the current copyright debates over such issues as file sharing, online video, and remix culture.

ENGL 015 401 CIMS 015 401 COML 016 401 Tuesday and Thursday | 1:30 p.m. to 3:00 p.m.

## **Black Cityscapes**

## Tsitsi Jaji, Assistant Professor of English

This seminar examines fiction and films set in cities including Dakar, Palmares, Kingston, Paris, Bulawayo, Algiers, London, and Johannesburg. In each text experiences of urban space are central. We will consider what is unique about cities in the African diaspora and in Africa, and what may or may not justify calling metropolitan cities like Philadelphia part of the African diaspora. In addition to analyzing texts in the classroom we will engage with Penn's neighborhood, West Philadelphia, where emerging relationships between recent black immigrants and the historical African American culture(s) of this city reveal new aspects of "diaspora." We will draw upon critical essays on geography and space by authors such as Henri Lefèbvre, David Harvey, Achille Mbembe, Arjun Appadurai, Édouard Glissant, Brent Hayes Edwards as we work out our own definition(s) of a "cityscape."

ENGL 016 401 AFRC 017 401 Tuesday and Thursday | 12:00 p.m. to 1:30 p.m.

## **Human Nature and History**

#### Michael Zuckerman, Emeritus Professor of History

In this seminar, we will take up the topic of human nature as a gambit for establishing common ground and stimulating a deeper intellectual community among incoming University Scholars. Or perhaps we will work the other way round. Perhaps we will draw upon that deeper community as a way of enriching our conversation as we take up the perennially challenging topic of human nature. Either way, we will engage in a wide-ranging reconnaissance of major theories on the topic. We will examine conceptions of humankind drawn from such disciplines as economics, psychology, religion, literature, linguistics, anthropology, and philosophy. Lurking behind all of our endeavor will be questions of time and place, questions, if you will, of history; is human nature best understood as constant or contingent, stable or changeful with time and circumstance? We should have a lot of fun. (Open only to first year students in the University Scholars Program.)

HIST 104 301 Wednesday | 2:00 p.m. to 5:00 p.m.

### **Introduction to Sound Studies**

## Naomi Waltham Smith, Assistant Professor of Music

Sound is all around us and shapes almost every aspect of our everyday lives, and yet, in comparison to our rich descriptions of visual culture, we often lack the explanatory power to analyze and assess the overwhelming influence

of the sonic. This introduction to sound studies course will provide both a rigorous conceptual and also a creative, hands-on understanding of the phenomena that were at the center of Penn's recent Year of Sound. We will explore how sound and auditory cultures have been theorized, how soundscapes shape and transform built environments and the social relations they underpin or express, how technologies have affected our relationships to sound, and how we might go about investigating aural phenomena.

The course will focus on sound in urban spaces. Structured around a number of themes that cut across disciplinary, historical and geographical boundaries, the course will create a transatlantic dialogue between investigative fieldwork into Philadelphia's soundscape and the changing auditory profile of Paris from the clatter of medieval sword fights through the cultivation of modern urban experience in Haussmann's boulevards to the contemporary soundscape. Other topics will include the innovative use of sound effects to create city spaces in film, the role of sound reproduction and mobile technologies, and the consumption and regulation of sound. We will encounter a wide variety of materials from literary texts and films to mobile apps and video games, not to mention a vast range of sounds, and we will tackle the topic from multiple interdisciplinary angles from Continental philosophy to ask how sound composes and structures urban space, and how it transforms social bonds and power relations. Alongside written work, you will make fieldwork recordings on the streets of Philadelphia and develop creative projects using media of your choice to reflect upon urban sound.

MUSC 018 401 URBS 018 401 Tuesday and Thursday | 1:30 p.m. to 3:00 p.m.

## **Music in Urban Spaces**

## Molly McGlone, Assistant Dean for Academic Advising

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, linguists, 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 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 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 microcultures of West Philadelphia. This course extends over two-semesters, is tied to the Music and Social Change Residential Program in Fisher Hassenfeld, and requires that participants volunteer in music classrooms for about 3 hours per week in addition to attending the seminar and completing all assignments.

Students will be challenged to understand the complex cultural relationship between music, identity, and the resistance or reification of stereotypes based on race, class, gender, and other forms of difference. Students will learn from, teach and tutor local students in Philadelphia while being asked to reflect on how music encodes and resists stereotypes of social and economic class, race, sexual orientation, and other modes of identity. Students will be required to reflect on the role of the researcher in ethnographic fieldwork as part of their participant observations. In addition, all students will be required to attend concerts in different Philly music venues to provide further evidence about the role of music in society. Throughout the term students will engage in reflective writing that illustrates what they have learned about frameworks of thinking about music in urban spaces in connection with the particular social networks of the micro-cultures of West Philly students and various Philly music scenes.

This seminar carries one course unit over two semesters. It is an Academically Based Community Service course. Please send email to Dr. McGlone to request permission to enroll.

Cultural Diversity in the U.S. MUSC 018 402 URBS 018 402 Friday | 2:00 p.m. to 4:00 p.m.

### Beyond Biology--Enhancing the Human Mind through Technology

### Gary Purpura, Assistant Dean for Academic Advising

Some people have claimed that the prevalence of various information technologies in modern society is triggering a radical alteration to the structure of the human mind. The development of cognitive-enhancing drugs and of devices that interface with nervous systems to restore cognitive functioning in brain-damaged people provides further evidence to some of the transformative potential of technology on the human mind. In this course, we will examine the philosophical hypothesis that the human mind is a product of the interaction between biology, technology (broadly conceived), and culture. We will consider whether technologies that enable or enhance human mental faculties are best viewed as proper parts of the human mind or instead as merely external aids/tools. We will also consider the moral issues surrounding the use and accessibility of such technologies. 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

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

## **Imagining Asia: Russia and the East**

### Anna Aydinyan, Lecturer

This course examines the important role of the East in Russian literature and nationalism. Focusing specifically on the Caucasus, Central Asia, Iran, and Turkey, this course will analyze how Russian writers connected the East to Russian identity, and how their approaches implicate different artistic periods (Romanticism, Realism, Socialist Realism, Post-Modernism) and different political atmospheres (Tsarist Russia, Soviet Union, Post-Soviet).

Students will also ascertain how Russian literature on the East has affected and influenced literature and political movements produced in the East. In particular, students will analyze how Soviet Central Asian writers, Iranian Socialists, and contemporary Turkish writers were influenced by Russian literature and Soviet ideology. Ultimately, this course examines the impact of Russia's cultural and political history in 20th century Central Asia and the Middle East. Readings will include works by: Pushkin, Lermontov, Tolstoy, Dostoevsky, Platonov, Chingiz Aitmatov, Sadek Hedayat, Orhan Pamuk, and others.

Cross-Cultural Analysis

RUSS 222 401 NELC 222 401 COML 217 401 Monday and Wednesday | 2:00 p.m. to 3:30 p.m.

## Being Human: Identity in the Age of Genomics and Neuroscience

Sally Gibbons, Lecturer in the History and Sociology of Science

What, if anything, constitutes human nature? Does it reside in our genes? Does it reside in our brains?

How should we understand human dignity?

By exploring a variety of current debates – including those about what might distinguish us from non-human primates, whether there is a biological basis for race and racial differences, and what genomic or neurocognitive enhancements we might pursue – we will seek to understand the complex interplay between the genetic/biological and the social/cultural dimensions of our humanity.

More fundamentally, we will explore the way philosophers, anthropologists, sociologists and biologists have thought about the notions of human nature, identity and authenticity to guide our thinking about who we are and who we might aspire to become, individually and collectively.

STSC 019 301

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

#### **Introduction to Acting**

#### Marcia Ferguson, 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 exercise, interactive games, and ensemble building, students then learn and put into practice basic acting 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 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.

## Introduction to Acting - at Kings Court English College House

#### Rose Malague, 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 exercise, interactive games, and ensemble building, students then learn and put into practice basic acting 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 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.

Preference will be given to residents of KCECH.

THAR 120 302

Tuesday and Thursday | 12:00 p.m. to 1:30 p.m.

## Sector V - Living World

## **Music and the Brain**

## **Michael Kaplan**, Lecturer in the Biological Basis of Behavior

Every human culture that has ever been described makes some form of music. The musics of different cultures cover a wide range of styles, but also display fascinating similarities, and a number of features are shared by even the most disparate musical traditions. Within our own culture, music is inescapable - there are very few individuals who do not listen to some form of music every day and far more who listen to music virtually all day long. Appreciation of music comes very early: newborns prefer music to normal speech and mothers all over the world sing to their babies in a fundamentally similar way. And yet, despite this seeming ubiquity, the real origin and purpose of music remains unknown. Music is obviously related to language, but how? Why do so many cultures make music in such

fundamentally similar ways? What goes into the formation of music "taste" and preferences? Does music have survival value, or is it merely "auditory cheesecake", a superfluous byproduct of evolution as some critic have maintained? What is the nature of musical ability and how do musicians differ from non-musicians? In this course, we will look for answers by looking at the brain. Almost 200 years of scientific research into brain mechanisms underlying the production and appreciation of music is beginning to shed light on these and other questions. Although the sciences and the arts are often seen as entirely separate or even in opposition, studying the brain is actually telling us a lot about music, and studying music is telling us just as much about the brain.

BIBB 060 301

Tuesday | 1:30 p.m. to 4:30 p.m.

#### Descent with Modification: An Introduction to the Science of Evolution

## Paul Sniegowski, Professor of Biology

Evolution provides the unifying framework for the biological sciences and has been confirmed by a huge and diverse body of evidence. Public opinion polls show, however, that evolution continues to be socially and politically controversial in the United States. In this freshman seminar, we will explore the scientific basis for evolution by reading and discussing historical sources, a current nonspecialist text on evolution, and selected papers and articles from the scientific and popular literature. With our knowledge of evolutionary fact and theory as background, we will also discuss social and political opposition to the teaching of evolution. Grading will be based on participation in class discussions and on performance in several brief writing assignments. There is no course prerequisite, but high school introductory biology would be helpful.

BIOL 014 301

Wednesday | 2:00 p.m. to 5:00 p.m.

## **Sector VI - Physical World**

#### **Introduction to Environmental Earth Science**

## Alain Plante, Associate Professor of Earth and Environmental Science

This seminar is offered by Professor Plante to interested freshmen enrolled in his lecture course, Introduction to Environmental Earth Science. The course as a whole exposes students to the principles that underlie our understanding of how the Earth works. The goal of Earth System Science is to obtain a scientific understanding of the entire Earth system by describing its component parts (lithosphere, hydrosphere, atmosphere, biosphere) and their interactions and by describing how they have evolved, how they function, and how they may be expected to respond to human activity. The seminar extends the work of the main course with in-depth discussions of relevant current events and a social media project.

Students must enroll in both the freshman seminar (section 301, below) and each of the following:

ENVS 200.001 | Tuesday and Thursday | 10:30 a.m. - 12:00 p.m.

ENVS 200.201 | No separate meeting, but registration is required

Quantitative Data Analysis

ENVS 200 301

Monday | 2:00 p.m. to 3:30 p.m.

#### **Honors Physics I: Mechanics and Wave Motion**

### **Alan Johnson**, Professor of Physics and Astronomy

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; noninertial reference frames; oscillations.

Students must enroll in both the lecture (PHYS 170.301, shown below) and one of the labs (PHYS 170.302 or PHYS 170.303, below). The lecture meets for a fourth hour on Mondays from 2:00 - 3:00 p.m.

302 NG 15 T 0300PM-0500PM STAFF 15 OPEN LAB 303 NG 15 R 0100PM-0300PM STAFF 15 OPEN LAB

PHYS 170 301

Monday, Wednesday, and Friday | 10:00 a.m. to 11:00 a.m.

### Sector VII - Natural Sciences & Mathematics

## The Big Bang and Beyond

## Ravi Sheth, Professor of Physics and Astronomy

An introductory course for students who do not intend to major in a physical science or engineering, covering theories of the Universe ranging from the ancient perspective to the contemporary hot big bang model, including some notions of Einstein's special and general theories of relativity. Topics will include the solar system, stars, black holes, galaxies, and the structure, origin and future of the Universe itself. Elementary algebra is used.

Quantitative Data Analysis

ASTR 007 301

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

## **Structural Biology and Genomics**

## Ponzy Lu, Professor of Chemistry

Structural biology is the scientific method of describing, predicting and changing the properties of living organisms, including humans, based on "complete" genome chemical structures (sequence) and 3-dimensional structures of cellular components. The intellectual and technical revolutions that occurred during the 20th century made this possible. It is today's approach to understanding biology and solving problems in medicine. We will discuss how macroscopic biological properties, such as reproduction, locomotion and viral infection, are determined by the physics and chemistry of proteins and nucleic acids. Changes in biological function, in hereditary diseases like cystic fibrosis or sickle cell anemia, result from single amino acid changes in individual proteins. Much larger changes in genome and protein structure are often tolerated without consequence. Understanding and exploiting these phenomena at the molecular level is the basis of the technology in the agricultural, energy and drug industries. The broad range of medical, social and political problems associated with the advances will be considered. We will attempt to distinguish real progress from fads and fashion. The weekly reading assignment will be *Science* and the Tuesday *New York Times*. This is a two-semester seminar with 0.5 credit unit each semester of the academic year. Chem 022.301 | Tuesday & Thursday | 8:00am - 9:00am

CHEM 022 301

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

### The Landscape of Research and Innovation at Penn

### Mark Liberman, Professor of Linguistics

At Penn there are thousands of faculty, staff, and students engaged in an extraordinary variety of research projects. The goal of this freshman seminar is to give entering students an overview of this landscape. Participants will survey and discuss the content of a dozen fields and sub-fields, and will also learn how to get involved in research and innovation during their time at Penn. Each student will develop an individual plan, covering the acquisition of needed knowledge and skills, the development of personal and social connections, and the exploration of on- and off-campus research opportunities of various kinds.

We will meet twice a week. At one weekly meeting, an active researcher will join us for an informal discussion, in the context of the regularly-scheduled series of "Dinners with Interesting People" in the Quad. In the other weekly meeting, we will review background reading and discuss the featured area, including exercises in computational modeling of real datasets.

Preference for enrollment will be given first to students from the Research, Innovation, and Entrepreneurship Residential Program in Ware College House.

Quantitative Data Analysis

LING 005 301

Tuesday and Thursday | 6:00 p.m. to 7:30 p.m.

## **Seminars in Mathematics**

## **Proving Things: Analysis**

## Herman Gluck, 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.

MATH 202 301

Tuesday and Thursday | 12:00 p.m. to 1:30 p.m.