

# Bracketed Courses 2015-2016

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The courses were not offered during the 2015-2016 academic year, but were displayed as expected to be offered in future semesters.

## African and African American Studies

### **AFRAMER 10 Introduction to African American Studies**

Course ID: 122910

Faculty: Henry Gates

Next Term Offered: 2017 Spring

An exploration of some of the key texts and issues in African American Studies from a range of disciplinary perspectives. Members of the faculty deliver guest lectures in their own areas of specialization.

### **AFRAMER 106X Contemporary African Music: Global and Local**

Course ID: 109467

Faculty: Ingrid Monson

Next Term Offered: 2017 Fall

Examines contemporary African music with emphasis on the relationship between traditional and popular genres. Of particular interest are themes of music and social commentary, music and public health, music and political conflict, and music and youth empowerment. Case studies from Mali, Nigeria, Kenya, Democratic Republic of the Congo, and South Africa will be featured.

### **AFRAMER 107X Race, Ethnicity, and the Empire**

Course ID: 156678

Faculty: George Paul Meiu

Next Term Offered: 2017 Fall

This course explores how discourses and embodied encounters have produced Otherness through racial and ethnic categorizations and how such categories mediate political and economic interventions in the colonial and postcolonial world. How do discourses of racial, ethnic, and cultural difference shape the lived worlds of those they claim to represent? How does alterity emerge and how is it embodied by subjects of difference? And what is the role of globalization, commodification, and consumption in the regeneration, reconfiguration, or erasure of markers of difference? Students will revisit classic texts in postcolonial theory and critical race theory in order to explore how their conceptual insights can be translated into ethnographic practice and historical analysis. If anthropology has long been invested in various categories of difference, this course also sets out to rethink what the discipline can offer towards a critical investigation of the production of alterity in the (post)colonial world.

### **AFRAMER 109 Using Film for Social Change**

Course ID: 127111  
Faculty: Joanna Lipper  
Next Term Offered: 2016 Fall

New technology and democratized access to digital media powerfully impact strategies aiming to heighten global awareness of local issues and are integral to efforts seeking to inspire empathy, political engagement, social activism, and charitable giving. With a focus on race, gender, and identity, this course will explore the portrayal of the human condition across cultures in feature films, documentaries, and photography. Students will have the opportunity to create their own multimedia projects.

**AFRAMER 112 Black Humor: Performance, Art, and Literature**

Course ID: 122487  
Faculty: Glenda Carpio  
Next Term Offered: 2017 Spring

This course explores the cultural richness of African American humor through analyses of stand-up, drama, the visual arts and literature from the 19th century onward. Artists include but are not limited to Richard Pryor (and many other important figures in black comedy), the painter Robert Colescott, the artists Kara Walker, writer William Wells Brown, Charles W. Chesnutt, George Schuyler, and Ishmael Reed.

**AFRAMER 116 Autobiography and Memoir: Remembering the Self**

Course ID: 156935  
Faculty: Jamaica Kincaid  
Next Term Offered: 2018 Spring

Close readings of classic autobiographies: Fredrick Douglas, Booker T. Washington, Thomas Jefferson, Henry Adams, Elizabeth Keckley; and contemporary memoirs by Ta Nahesi Coates, Hilton Als among others. A weekly critical paper is required; the final paper is a creative one, a short memoir.

**AFRAMER 116X The Child in the Empire**

Course ID: 159568  
Faculty: Jamaica Kincaid  
Next Term Offered: 2016 Fall

A close reading of how childhood is portrayed in fiction and non-fiction in colonial society. Readings from: Naipaul, Soyinka, Dorris Lessing, Merle Hodge, Tsitsi Dangarembga, Simone Schwartz-Bart, among others.

**AFRAMER 116Y Landscape and The African American**

Course ID: 159569  
Faculty: Jamaica Kincaid

Next Term Offered: 2018 Spring

A people often come to regard the places in which they have lived for generations as a positive influence in every way on their character; that they and the land are inseparable. Close readings of how this idea is presented in African Diaspora literature. To be read: a number of slave narratives, Baldwin, Wright, Morrison among others.

**AFRAMER 120X African American Theatre, Drama, and Performance**

Course ID: 108167

Faculty: Robin Bernstein

Next Term Offered: 2016 Fall

A study of African American practices of performance from the 19th century through the present. This seminar will meet twice each week: first, in a classroom to discuss scholarship on black performance, and second, in a Harvard archive to work directly with primary materials. Topics include abolitionism, the Harlem Renaissance, the Black Arts Movement, and hip-hop.

**AFRAMER 132Y Issues of Race, Culture, and Class in 'Post-Civil Rights' Political and Social Theory**

Course ID: 160418

Faculty:

Next Term Offered: 2017 Fall

In 1968, Martin Luther King and Robert F. Kennedy were assassinated, Richard Nixon was elected, and the 1965 immigration act allowing for expansive immigration from non-European countries finally went into effect. These events, coupled with the dismantling of *de jure* segregation just a few years earlier heralded a massive set of changes underway in the political, racial, and cultural composition of the United States. This course explores some of the most interesting and challenging efforts of political theorists, philosophers, social theorists, and cultural critics interested in issues of race, culture, and class to come to terms with this "post-civil rights" landscape and articulate normative principles, critical social theories, and political programs that speak to enduring injustices, recently emergent problems, and possible futures.

**AFRAMER 141X Prejudice and Racism in Modern Society**

Course ID: 110076

Faculty: James Sidanius

Next Term Offered: 2016 Fall

This course provides a survey of the psychology of prejudice and racism, the scientific study of human feeling, thinking, and behavior in situations involving conflict between groups. More broadly, we will consider the psychological factors that contribute to the perpetuation of inequality and discrimination. Throughout the course, we will consider both proximate (immediate) influences on behavior, such as the immediate social situation as well as distal (more remote) influences on behavior, such as human evolution. We will also consider both conscious and unconscious attitudes and behavior.

**AFRAMER 145X The Hip-hop Cipher: "These are the Breaks" [With 9th Wonder]**

Course ID: 108837

Faculty: Marcyliena Morgan

Next Term Offered: 2017 Spring

The Hip-hop Cipher is an in-depth look at aspects of hip-hop. It is for students who have taken courses on hip-hop and popular music and culture. It closely examines a particular issue and topic and includes guest lecturers and master classes on areas or issues in hip-hop culture, art, scholarship and performance. Spring 2013 will feature Grammy Winning producer 9th Wonder. These are the Breaks: The connection between vinyl from the 60's, 70's and 80's and birth of what we now know as hip-hop music, is a connection that is known by producers, DJ's and collectors of music, but not to academia. Various political, cultural, and social movements of the 1960's created an environment for the stories of soul, jazz, and funk produced in the 1970's, which in turn created the platform for our most treasured hip-hop albums (Illmatic, The BluePrint, The Chronic, College Dropout, The Minstrel Show). "Diggers" from around the world travel from country to country, from record shop to basement, in search of the original "breaks" used for these albums, in some cases for 10+ years. This course examines the important break beats in hip-hop and the cultural, political and social movements and contexts that the beats, songs and production represented.

**AFRAMER 154 Language and Discourse: Race, Class and Gender**

Course ID: 115725

Faculty: Marcyliena Morgan

Next Term Offered: 2016 Fall

Our purpose is to study, analyze, and critique theories concerning the discursive construction of identity(s) and forms of representation of cultures. We explore the relationship between power and powerful speech through reviews and critiques of theories of language, culture, and identity as they relate to ethnicity, race, and social class. Our focus is on language, ideology, and analysis of discourse styles used in the construction of regional, national, and global communities.

**AFRAMER 160 Christianity, Identity, and Civil Society in Africa**

Course ID: 125927

Faculty: Jacob Olupona

Next Term Offered: 2017 Spring

This course is a historical survey of the centuries-old Christian traditions in Africa. It begins with an outline of the trajectory of Christianity's origins and presence in Africa from its beginning in ancient Mediterranean lands through the early period of European missionaries to the contemporary period. The course provides the ethnography of the old mission churches, indigenous independent African churches, and contemporary evangelical and Pentecostal Charismatic movements. The course explores the role of Christianity in relation to historical, cultural, social, and material realities of the African continent. It examines a broad range of topical issues related to conversion, missionization, and the development and growth of Christian agencies in Africa in relation to the construction of social, theological, and religious identities, as well as Christianity's response to cultural pluralism, nationhood, citizenship, and civil society.

### **AFRAMER 161 Religion, Diaspora, and Migration: Seminar**

Course ID: 125928

Faculty: Jacob Olupona

Next Term Offered: 2018 Spring

This seminar explores critical and interdisciplinary approaches to the place of religion and the emergence of the new immigrant and diaspora communities in the modern world, and the discourses emerging from the practice of diaspora and migration scholarship. Using historical, ethnographic, and textual sources, the course will illuminate the lived religious experiences of immigrant and diaspora communities in the United States and elsewhere. It introduces critical perspectives on forms of interaction between religion and other aspects of social identity - ethnicity, gender, nationality, race, age, and sexuality, as well as transnational and global influences on social and cultural identity. The course also examines the complex networks of economic, cultural, and technological innovations that the "new" diaspora and immigrant communities have developed to make sense of their spiritual and cultural lives in new situations.

### **AFRAMER 164 Mother Tongue: African American English and Social Change**

Course ID: 126716

Faculty: Marcyliena Morgan

Next Term Offered: 2017 Spring

This course focuses on African American English and discourse and provides a critical exploration into the notions of language life, death and power. It is concerned with the language, discourse and symbolic systems that construct and represent race, class and gender in the US. We use methods from linguistic anthropology and philosophy to explore language ideologies and the relationship between power and powerful speech. In this course we will review and critique theories of language, communication, culture, and identity as they relate to ethnicity, race, gender, and power. In particular, we are interested in how language mediates and constructs identity, how we associate language with race, class and gender, and how we resist and manipulate these associations. To answer these questions we examine both public and popular culture, as well as education, literature, film and other media. Topics include: Discourse of Politics, Race, Class, Radical Language Theory and Ideology, Breaking and Making Linguistic Rules. Marking Blackness, Normalizing Blackness, Grammaticalization and Ideology.

### **AFRAMER 175X Policing and Militarization Today**

Course ID: 159571

Faculty: Laurence Ralph

Next Term Offered: 2016 Fall

The issue of force is at the heart of policing and militarization. Scholarship conceives of force as being spread across a continuum. This broadly encompasses the physical presence of the beat cop to the global force of military occupation. Deadly force, an issue in both militarization and policing, is a growing concern today. For a long time, students of policing have thought that the police continuum of force ceases where the military one starts (with lethal force involving a growing number of casualties). Yet, in the wake of Ferguson, contemporary forms of civil unrest serve to

question old theories. The threat of uprisings have transformed some non-war zones, like U.S. metropolitan areas, into battle zones where police resemble the military—helmets, flak jackets, armoured tanks, and tactical force. This course explores policing and militarization from an anthropological perspective. Students will examine the militarization of borders, bodies and sites, contemporary issues of policing in various contexts, different subjects' encounters with police and the military, questions of religion, race, gender and sexuality, along with the practice of militarized policing in the United States and abroad.

### **AFRAMER 178 Health, Society, and Subjectivity in the American Context**

Course ID: 127878

Faculty: Laurence Ralph

Next Term Offered: 2017 Fall

While diseases are often imagined to be scientific, medical conditions, they are also social constructs. In the nineteenth century, for example, the condition of Dysaesthesia Aethiopsis (an ailment that made its sufferers "mischievous") was considered nearly universal among free blacks. Today, diseases like AIDS and tuberculosis are often associated with personal attributes, while the social forces at work to structure risk for acquiring these illnesses are glossed over. This course examines the ways people reproduce and challenge contemporary visions of society through the lens of social injury, and in the process cultivate subjectivities that are marked by race, gender, class.

### **AFRAMER 179 Jazz, Freedom, and Culture**

Course ID: 117452

Faculty: Ingrid Monson

Next Term Offered: 2018 Spring

This course explores the history of the musical tradition known as jazz from its roots in African American popular musical styles at the turn of the 20th century to its contemporary life as a global improvisational art music. We devote considerable attention to the history of jazz improvisation as a musical process and also explore the cultural, aesthetic, racial, and social debates that shaped the development of the music. On the one hand, jazz fashioned itself as the ultimate modern music with freedom and justice for all, and, on the other, provided an arena in which complex debates about race, cultural ownership, and social disparity repeatedly took place.

### **AFRAMER 187 African Religions**

Course ID: 123438

Faculty: Jacob Olupona

Next Term Offered: 2016 Fall

This course is a basic introduction to the history and phenomenology of traditional religions of the African peoples. Using diverse methodological and theoretical approaches, the course will explore various forms of experiences and practices that provide a deep understanding and appreciation of the sacred meaning of African existence: myth, ritual arts, and symbols selected from West, East, Central, and Southern Africa.

**AFRAMER 189X Medicine, Culture, and Society**

Course ID: 108677

Faculty: Jean Comaroff

Next Term Offered: 2017 Spring

This course examines the changing place of medicine in the long history of modernity. Focusing on key moments - the birth of the clinic, the colonial frontier (where biomedicine met its therapeutic "others"), the consolidation of medicine as self-governing profession, the age of genomics and biocapital - it explores the distinctive role of medical knowledge in the making of modernist persons, identities, and social worlds. Readings are drawn from across the social sciences, with material from Africa, Europe, and North America. Part lecture, part discussion, the class will be open to upper-level undergraduates and graduates.

**AFRAMER 190X The Anthropology of Law: Perspectives from Africa and Elsewhere**

Course ID: 108678

Faculty: John Comaroff

Next Term Offered: 2017 Spring

The course will cover (i) classical readings in the field, (ii) conceptual questions focusing on the often counter-intuitive theoretical insights to be gained from the non-Western legal systems, (iii) law and colonialism, (iv) liberalism, difference, and the law in the postcolonial world, and (v) the judicialization of politics around the globe. Throughout, attention will be given to the lessons to be learned from legal anthropology for interrogating the present moment in the global north. Grades will be based on class participation, course presentations, and a term paper.

**AFRAMER 192X Religion and Society in Nigeria**

Course ID: 122498

Faculty: Jacob Olupona

Next Term Offered: 2018 Spring

The seminar examines the historical development of religion in Nigeria and explores its intersection with ethnic identity, culture, and society in pre-colonial, colonial, and contemporary periods. The course provides an understanding of various cultural tradition, historical events, and social forces that have shaped Nigeria's religious express. Many topical issues will be explored such as indigenous religious culture, Christian and Muslim identities, civil religion, and civil society and democratization, as well as religion and politics in present-day Nigeria.

**AFRAMER 213 One Drop of Spit: Re-Inventing Race in the Age of Genomics**

Course ID: 159573

Faculty: Evelyn Hammonds

Next Term Offered: 2016 Fall

This course will examine how new technologies in genomics have transformed the study of human genetic variation in people around the world. These new technologies are transforming our

understanding of human origins and the pathways along which human beings have populated the globe. They have spurred the use of genetic tests in medicine and forensics and brought new uncertainty to notions of identity, kinship, and citizenship. The course will focus on how historians of science and medicine, scientists, and social scientists engage with these new technologies and their scientific, societal and political currency.

**AFRAMER 220 Seminar: New Themes in the Study of the African Diaspora: Editorial Internship with Transition**

Course ID: 110495

Faculty: Alejandro de la Fuente

Next Term Offered: 2016 Fall

Students in this seminar will work with the editor of Transition to design, edit, and produce the journal. Housed at the Hutchins Center for African and African American Research ([hutchinscenter.fas.harvard.edu/transition](http://hutchinscenter.fas.harvard.edu/transition)), Transition is the longest running Pan African cultural magazine in history. Founded in Uganda in 1961, the journal quickly became Africa's leading intellectual forum. It was later edited by Nobel Laureate Wole Soyinka in Ghana before arriving at Harvard in 1991 with publishers Henry Louis Gates, Jr. and Kwame Anthony Appiah. Some of the best scholars and minds of the Diaspora have contributed to this journal, including Martin Luther King Jr., Chinua Achebe, James Baldwin, Julius Nyerere and many others. Students in this class will familiarize themselves with the history of Transition; chart new directions for the journal; identify topics of Pan African significance and potential contributors on those topics; and serve as critical readers of materials submitted for publication to the journal. Students will be listed in the issues of the journal they help produce as "student associate editors".

**AFRAMER 222 Proseminar: Afro-Americas II: Comparative Race Relations in the US and Latin America**

Course ID: 110500

Faculty: Alejandro de la Fuente

Next Term Offered: 2016 Fall

This seminar offers a systematic comparison of race relations in the United States and Latin America after emancipation. Writing in 1950, Alfred Métraux, a Swiss-American anthropologist who became the Director of the UNESCO Division for the Study of Race Problems, captured the then prevalent view that race operated very differently in "Anglo-Saxon" and "Latin" America. He made reference to the "favorable impressions produced by Brazil's race relations" and to the fact it had "been hailed as one of the rare countries which have achieved a 'racial democracy'." Whereas rigid forms of racial segregation characterized the United States, most countries in Latin America were seen as mestizo, racially-mixed nations that did not have a rigid color-line. Scholars have been debating the accuracy of these characterizations during the last sixty years. This seminar offers an introduction to this scholarship, assesses the current state of the field, and seeks to identify problems and questions for future research.

American Studies

**AMSTDIES 200 Major Works in American Studies**

Course ID: 113328

Faculty:

Next Term Offered: 2016 Fall

A survey of the field, with an emphasis on the range of interdisciplinary methods in the humanities, history, and social sciences.

## Anthropology

### **ANTHRO 92ZR Social Anthropology Research Methods in Museum Collections**

Course ID: 123455

Faculty:

Next Term Offered: 2016 Fall

Special (individual) study of Peabody Museum collections directly supervised by a faculty member and a member of the curatorial staff. Requires a project involving a Harvard Museum collection, developed in consultation with the supervisors.

### **ANTHRO 1045 Ancient Settlement Systems: Seminar**

Course ID: 122001

Faculty:

Next Term Offered: 2017 Spring

Approaches to spatial patterning in human societies, including the structure of settlements and the regional distribution of populations. The seminar will consider how variation in settlement and settlement systems can be related to factors such as environment, economy, and social and political organization. Case studies will be drawn from a range of New and Old World societies of varying scales of sociopolitical complexity.

### **ANTHRO 1065 The Ancient Near East**

Course ID: 125577

Faculty:

Next Term Offered: 2016 Fall

From the earliest urban and literate civilizations to the formation of empire we shall review the political, economic, and religious beliefs of the Sumerians, Babylonians, and Egyptians. These early civilizations will then be discussed in the context of the first internationalism that brought them into contact with their near and distant neighbors from eastern Europe to Central Asia, Africa, and South Asia. The political use of the past by modern nation states will be reviewed.

### **ANTHRO 1080 North American Archaeology: Lost Tribes and Ancient Capitals of Native America**

Course ID: 125588

Faculty:

Next Term Offered: 2017 Spring

Archaeology of Native North America, from the first appearance of humans on the continent to the arrival of Europeans in the 1500s. Topics to be covered include: history of the discipline; megafaunal extinctions; Archaic deep-sea fishers in the Northeast; buffalo hunters on the Northern Plains; origins of agriculture; moundbuilding cultures of the Midwest; Pueblo peoples of the Southwest; complex foragers of the Northwest coast; dynamic contact period interactions; and current political debates and ethical issues relating to the archaeology of North America.

### **ANTHRO 1090 Ethnography and Archaeology**

Course ID: 119948

Faculty:

Next Term Offered: 2018 Spring

Archaeologists often draw on ethnographic studies of Western and non-Western societies as sources of explanation for ancient cultural practices. But the questions remain: how valid is the use of ethnographic analogy in the study of the past? What assumptions do archaeologists make about past social processes in their uses of ethnographic studies? These are some of the questions addressed in this course.

### **ANTHRO 1130 Archaeology of Harvard Yard**

Course ID: 121141

Faculty: Patricia Capone

Next Term Offered: 2016 Fall

Archaeological data recovered from Harvard Yard provide a richer and more nuanced view of the 17th through 19th century lives of students and faculty in Harvard Yard, an area that includes the Old College and Harvard Indian College. Students will excavate in Harvard Yard, process and analyze artifacts, and report on the results. Additional topics to be covered include regional historical archaeology, research design, surveying, archival research, stratigraphy, and artifact analysis.

### **ANTHRO 1131 Archaeology of Harvard Yard II: Laboratory Methods and Analysis**

Course ID: 123195

Faculty: Diana Loren

Next Term Offered: 2017 Spring

Open to students who participated in the fall term investigations in Harvard Yard, this course focuses on the detailed analysis of the materials recovered in the excavations, within the context of archival and comparative archaeological and historical research. The analysis will also include an evaluation of the results of the ground-penetrating radar surveys conducted prior to the excavations, as part of the research design for the next season of investigations of the Indian College site.

### **ANTHRO 1155 The Archaeology of Cities in Ancient Mesopotamia**

Course ID: 124732

Faculty:

Next Term Offered: 2018 Spring

The world's first cities emerged in Mesopotamia and were the defining characteristic of ancient civilizations in what is today Iraq, Syria, and Turkey. They were inhabited by large populations, powerful kings, and the gods themselves. The course will consider the origins, ecology, spatial arrangement, socioeconomic religious organization, religious institutions, and collapse of cities from

Gilgamesh to Saddam. Through archaeology and ancient texts, students will become familiar with cities such as Uruk, Babylon, Nineveh, and Baghdad. The course will include visits to collections of the Peabody Museum and the Harvard Semitic Museum.

### **ANTHRO 1158 Maya Narratives: Gods, Lords, and Courts**

Course ID: 128062

Faculty:

Next Term Offered: 2016 Fall

This course explores the continuing investigation of Classic Maya texts and images, and how new decipherments have changed our understanding of the ancient Maya world. The Classic Maya are the only Pre-Columbian civilization with a substantial corpus of inscriptions produced well before any contact with the Old World. Maya written and visual narratives reveal details of history and myth, life at the courts of lords and nobles, and religion and worldview. Their testimonies are often striking, unique, and hard to understand, but they are not mediated by non-indigenous interpreters and open a window into a world long gone.

### **ANTHRO 1166 Amerindian Languages and Literatures**

Course ID: 128003

Faculty:

Next Term Offered: 2016 Fall

This course surveys the indigenous literatures (both Pre-Columbian and Colonial) of several New World civilizations (the Aztecs, Inka and Maya) from a comparative anthropological perspective. Included are brief introductions to the languages of these early documents (Nahuatl, Quechua and Mayan), as well as a discussion of their literary conventions, contents, and significance for an understanding of the cultures that produced them. A particular focus will be on the diachronic changes in these literatures since Precolumbian times, indicative of the complex and contested landscape of Spanish Colonization.

### **ANTHRO 1168 Maya Glyphs**

Course ID: 128061

Faculty:

Next Term Offered: 2017 Fall

Learn to read and write in Maya glyphs to discover the most spectacular civilization in the Americas in its own words! This course covers the basics of Maya writing and art using the outstanding visual and material collections of the Corpus of Maya Hieroglyphic Inscriptions and Peabody Museum of Archaeology and Ethnology. It explores the indigenous Maya myths, histories, and stories of life at the ancient courts of lords and nobles.

### **ANTHRO 1170 Mesoamerican Writing Systems**

Course ID: 120349

Faculty:

Next Term Offered: 2016 Fall

This course explores the role of writing broadly defined in the social, political, and religious fabric of ancient civilizations of Mexico, Guatemala, Belize, and Honduras. This region known as Mesoamerica is characterized by an amazing variety of indigenous writing systems, from phonetic ones like Maya hieroglyphs, to largely pictographic notations such as Mixtec records. The course offers a survey of Mesoamerican writing systems that centers on the basic properties of the scripts and their uses. It highlights how specific features of Mesoamerican writing systems reflect broader regional traditions with respect to the role of writing in social, political, and religious life.

### **ANTHRO 1210 The Archaeology of Ancient China**

Course ID: 119371

Faculty:

Next Term Offered: 2017 Fall

A survey of the archaeology of China from the origins of humans during the Palaeolithic into the Bronze Age (ca. 220 BCE), with an emphasis on the origins of agriculture and the emergence of complex society during the late Neolithic and Early Bronze Age. We survey important archaeological finds from these periods and examine relevant issues in anthropological archaeology. Sections will involve the discussion and use of materials from the Peabody and Sackler Museums.

### **ANTHRO 1212 The Archaeology of Modern Human Origins: Seminar**

Course ID: 110288

Faculty:

Next Term Offered: 2017 Fall

One of the key areas of debate in paleoanthropology today is the emergence and dispersal of biologically and culturally modern humans. This seminar provides students with the scientific foundation to contribute to this debate and to understand its significance in a broader anthropological context. Using readings, discussion, hands on analysis of ancient artifacts and student-driven presentations, we will examine the history of investigation, relevant methodological, interpretive and epistemological issues, and a detailed survey of the empirical data from our African roots to the subsequent global dispersal and replacement of hominin populations that included the Neanderthals.

### **ANTHRO 1230 African Archaeology**

Course ID: 110107

Faculty:

Next Term Offered: 2016 Fall

This course focuses on ancient human populations in Africa from the earliest Stone Age foragers more than 2.5 million years ago to more recent periods characterized by food production, urbanism, and inter-continental networks of trade and exchange, situating the African evidence into a broader understanding of the evolution of human diversity. The course use lectures, in-class discussions, museum collections, and student projects, and in addition to archaeology, draws on a number of

allied disciplines including history, ethnography, linguistics, art history, geography, geology, paleontology, and biology.

**ANTHRO 1250 The Pyramids of Giza: Technology, Archaeology, History: Seminar**

Course ID: 127050

Faculty:

Next Term Offered: 2016 Fall

Focuses on the Pyramids, Sphinx, and tombs at Giza (ca. 2500 BC), in the context of ancient Egyptian history, art, and archaeology. The HU-MFA Expedition excavated Giza, resulting in today's Giza Project at Harvard. Seminar takes place in Harvard's Visualization Center with 3D viewing of the Giza Necropolis on a 23-foot screen, and consists of introductory lectures, student presentations, and field trips. Topics range from challenges of archaeological information processing to Old Kingdom mortuary art and architecture, to issues of ownership and repatriation. Students will also contribute to the (real world) Giza Project at Harvard.

**ANTHRO 1619 Cinema and Desire: Studio course**

Course ID: 110006

Faculty: Lucien Castaing-Taylor

Next Term Offered: 2017 Spring

Students produce audio-visual works that explore the body, desire, and sexuality, and their significance in human existence.

**ANTHRO 1636 Latin American Cities: Urban Images, Landscapes, and Citizens**

Course ID: 156529

Faculty:

Next Term Offered: 2017 Fall

This course examines urbanization and urban culture in Latin America. Drawing on an interdisciplinary set of works from anthropology, urban studies, and contemporary film, we will explore themes such as planning, space, violence, inequality, informality, citizenship, and consumption, among others. The course studies Latin American cities as developing at the intersection of projects that seek to impose order and everyday practices of contestation. In looking at the tensions between these visions of urban life, we will consider what Latin America reveals about the future of contemporary urbanism and its utopian and dystopian imaginaries.

**ANTHRO 1682 Gangsters and Troublesome Populations**

Course ID: 128063

Faculty: Laurence Ralph

Next Term Offered: 2017 Spring

The term "gang" has been used to describe all kinds of collectives, from well-dressed mobsters to petty criminals to juvenile delinquents. About the only thing that has remained consistent about

gangs is their characterization as the internal Other. This class will investigate how the category of "the gang" serves to provoke discourses of "dangerous" subjects in urban enclaves. More broadly, we will examine the methods and means by which liberal democratic governments maintain their sovereign integrity through the containment of threatening populations.

### **ANTHRO 1698 Anthropology of Death and the Afterlife: Seminar**

Course ID: 109571

Faculty: Anya Bernstein

Next Term Offered: 2016 Fall

This course explores how different cultures imagine death and the afterlife, drawing on insights from the anthropology of religion, politics, and medical anthropology. Based on readings that range from classical ethnographies of death and dying to contemporary debates on the politics of death, we will discuss cultural theories on what constitutes the moment of death and what happens after, as well as investigate the political lives of dead bodies. The topics covered include conceptualizations of the body and mind, ideas of the spirit world, witchcraft, mortuary rituals, relic veneration, royal and communist corpses, organ donation, end-of-life care, and concepts of biopolitics and bare life.

### **ANTHRO 1727 Sensory Korea**

Course ID: 156397

Faculty: Nicholas Harkness

Next Term Offered: 2017 Spring

Spicy stews and softer soju, warm hearts and clean voices, fire illness and refreshing prayer: these are various sites through which Korean social life materializes. This course introduces contemporary South (and North) Korea through the cultural semiotics of the senses. Lectures and discussion will explore social class and mobility through the tastes and smells of food and drink; gender and religion through bodily experiences of illness and healing; politics and kinship through mass spectacle and feelings of human contact; and urban modernity through sound. Course materials combine history and ethnography, social and semiotic theory, and multimedia documentation.

### **ANTHRO 1742 Housing and Heritage: Conflicts over Urban Space**

Course ID: 127137

Faculty: Michael Herzfeld

Next Term Offered: 2017 Fall

The celebration of national and local forms of heritage often rides roughshod over the interests of the local citizenry it is intended to serve. In this course we look at how such conflicts play out in several cities - notably Athens, Bangkok, Beijing, Istanbul, Jerusalem and Rome - and address the ethical, practical, and architectural conflicts that arise from an anthropological perspective.

### **ANTHRO 1795 The Politics of Language and Identity in Latin America**

Course ID: 122440  
Faculty: Catalina Laserna  
Next Term Offered: 2017 Spring

Introduces theory and research in linguistic anthropology in the context of ethnographic research, film and popular music, from cumbia to hip-hop in Latin America. Examines how the multiplicity and contention of language ideologies play out in the everyday practices. What are the social, linguistic and discursive means by which social identity is constructed? How do ways of speaking, such as border talk and code switching, link face to face communities to the national and transnational spheres? Texts include regional ethnographies, music and documentaries from the region as well as the literature in the burgeoning new field of linguistic anthropology.

### **ANTHRO 1882 The Woman and the Body**

Course ID: 107863  
Faculty: Susan Greenhalgh  
Next Term Offered: 2017 Fall

This course probes the culture and politics of the body in America today, stressing America's role as a center of bodily ideals that now dominate global imaginations. Emphasizing the intersections of gender with race/ethnicity, class, and sexuality, the course examines the diverse notions of beauty, bodily practices, and body politics embraced by American women (and, to a lesser extent, men) of different classes, ethnicities, and sexualities. It deals with critical issues facing our society in the early 21st century -- the growing prevalence of eating disorders, the normalization of cosmetic surgery, rising levels of childhood and adult obesity using contemporary theory to tease out their complex sources and effects. Lying at the intersection of the anthropology of the body, medical anthropology, and women's/gender studies, the course outlines an important new arena for critical inquiry.

### **ANTHRO 2000 Osteoarchaeology Lab**

Course ID: 113280  
Faculty: Richard Meadow  
Next Term Offered: 2016 Fall

Introduction to the osteoarchaeological analysis. Identification of animal bones and teeth from archaeological sites using comparative materials and their characterization employing visual, metric, and microscopic methods.

### **ANTHRO 2022 Picturing the Past: An Introduction to Digital Epigraphy and Archaeological Illustration**

Course ID: 109438  
Faculty:  
Next Term Offered: 2016 Fall

Explores the history, development, and current methodology behind archaeological illustration based on two sample cultures, ancient Egyptian (Old World) and Mayan (New World). Students will focus on epigraphy -- the creation of facsimile line drawings of relief sculpture, inscriptions, and

selected three-dimensional objects (via photography and 3D scanning) for publication. Labs will furnish access to today's computer and tablet devices, and students will gain practical experience working directly from objects in the various archaeological collections of Harvard University and beyond. No previous artistic training is assumed.

**ANTHRO 2111 Changes in the Land: The Archaeology of Humans and the Earth (Graduate Seminar in General Education)**

Course ID: 156674

Faculty: Jeffrey Quilter

Next Term Offered: 2018 Spring

How have humans shaped the environment and how has the environment shaped humans throughout their (pre)history? We will explore key theories and case studies and students will further explore these questions through independent research.

**ANTHRO 2155 The Archaeology of Cities of Ancient Mesopotamia**

Course ID: 156378

Faculty: Jason Ur

Next Term Offered: 2018 Spring

The world's first cities emerged in Mesopotamia and were the defining characteristic of ancient civilizations in what is today Iraq, Syria, and Turkey. They were inhabited by large populations, powerful kings, and the gods themselves. The course will consider the origins, ecology, spatial arrangement, socioeconomic religious organization, religious institutions, and collapse of cities from Gilgamesh to Saddam. Through archaeology and ancient texts, students will become familiar with cities such as Uruk, Babylon, Nineveh, and Baghdad. The course will include visits to collections of the Peabody Museum and the Harvard Semitic Museum.

**ANTHRO 2177 South American Archaeology**

Course ID: 128017

Faculty: Gary Urton

Next Term Offered: 2016 Fall

Provides an overview of Pre-Columbian civilizations on the continent of South America from the earliest record of human habitation to the time of the European invasion, in the sixteenth century. Focuses on the archaeology of the Amazon and Orinoco rivers, the Andes, and the Pacific coast of Peru and Chile. Extensive use will be made of the South American collections in the Peabody Museum.

**ANTHRO 2240 Archaeology of Production: Seminar**

Course ID: 124666

Faculty: Rowan Flad

Next Term Offered: 2017 Fall

An exploration of production in archaeological contexts. Topics include specialization, craft production, production and power, the practice/performance of production, production and gender, ritualized production, and the production of memory.

### **ANTHRO 2618 The Body in the Age of Obesity**

Course ID: 108975

Faculty:

Next Term Offered: 2016 Fall

This course takes a critical, anthropological look at the nation's cultural and political obsession with the "obesity epidemic." Placing the growing girth of Americans in historical and global context, it asks how the weighty body replaced smoking as the focus of the latest national "crisis," how the problem of "obesity" has been framed, what solutions have been put in place to address it, and with what effects for individuals and society at large. The course draws on work in many fields - from public health and the anthropologies of science and medicine; to American and fat studies; to political ecology, food systems, and food justice studies - in an effort to stimulate interdisciplinary conversations about what today's intense focus on obese bodies means for us as human scientists and as citizens of the world.

### **ANTHRO 2635 Image/Media/Publics: Seminar**

Course ID: 122006

Faculty: Mary Steedly

Next Term Offered: 2017 Spring

Explores the relations among technologies of image production and circulation, the nature and intensity of the circulating image, and the generation of publics and counter-publics. Questions of scale, mediation, publicity, and mobilization will be considered.

### **ANTHRO 2706 Disease, Disability, and the Body**

Course ID: 128005

Faculty: Laurence Ralph

Next Term Offered: 2018 Spring

This course will theorize the ways in which disability and disease become linked to inequality. We will explore the social factors that produce forms of suffering, as well as kinds of violence that people experience when social difference is mapped onto the materiality of their bodies.

### **ANTHRO 2725 Anthropology and History**

Course ID: 110314

Faculty: Ajantha Subramanian

Next Term Offered: 2017 Spring

Explores exchanges between the disciplines of History and Anthropology, emphasizing overlaps and distinctions in the treatment of mutual concerns such as the representation of time and space,

the conceptualization of power, and the making of the subject.

### **ANTHRO 2805 Biopolitics**

Course ID: 107830

Faculty: Susan Greenhalgh

Next Term Offered: 2018 Spring

The modern era has seen the rise of a new field of knowledge and power that takes as its object human life itself, in the biological sense. This course traces the emergence of an anthropology of biopolitics, teasing out the concepts, problems, and ethnographic practices by which this domain is being studied. Through explorations of biological and therapeutic citizenship, new practices of biosociality and biosecurity, and the creation of world-quality populations and persons, the course identifies new assemblages of technologies, logics, and ethics that are emerging in different spaces in an increasingly globalized world.

### **ANTHRO 2816 Law for Anthropologists, Anthropology for Lawyers**

Course ID: 128300

Faculty:

Next Term Offered: 2016 Fall

Theoretical and practical ideas, old and new, about law in society. Looking at the academic literature and at ethnographic description. The uses of the legal in fieldwork. Interpreting the place, shape, claims and efficacy of law in particular social and cultural contexts.

### **ANTHRO 2932 Anthropology of Governance**

Course ID: 156938

Faculty:

Next Term Offered: 2017 Spring

This course examines the nature of governance in the contemporary era of corporate ascendance, widespread violence, shifting responsibilities for social welfare, and pervasive feelings of insecurity. It asks what configurations of actors –states, corporations, citizens, NGOs, transnational bodies, para-states –are trying to manage social life in different domains, devoting particular attention to the role of scientists and scientific logics in informing debate and practice. Drawing on recent ethnographies, we investigate key technologies of governance (statistics, audit, documents, policy) in the administration of such fields as health/disease, environment, urban planning, public health, and security. The course is designed to help students currently developing PhD projects incorporate an interest in governance through science into their dissertation projects.

## Applied Computation

### **APCOMP 263 Data and Computation on the Internet**

Course ID: 108981

Faculty:

Next Term Offered: 2016 Fall

This course explores the Internet as a central component of modern scientific data processing and computation. We will examine the architecture of the Internet and the models of computation and data with which it is compatible. Through readings and exercises, students will explore the trade-offs of these various models and gain an appreciation for successful Internet-oriented system design for modern, federated, data- and compute-intensive scientific research. Students will complete a team project to develop an Internet-based system for scientific data processing. Python will be used for examples.

### **APCOMP 272 Kinetic Methods for Fluids: Theory and Applications**

Course ID: 127562

Faculty:

Next Term Offered: 2018 Spring

Systematic introduction to kinetic methods for studying fluids, based on the lattice Boltzmann equation. Emphasizes theory, including discrete dynamics and symmetry, as well as hands-on programming of basic algorithms for fluid flow simulations, paying attention to understanding of the theoretical basis and connection to real fluid physics. The course lays the foundation for further research on the method extensions, particularly in complex fluids and micro/nano-fluidics and presents specific applications in various science and engineering problems.

### **APCOMP 275 Computational Design of Materials**

Course ID: 128103

Faculty:

Next Term Offered: 2018 Spring

This course will provide the background and an extensive set of examples showing how computational methods are applied to modern design of materials with desired functionality. The methods will span multiple length and time scales, including molecular dynamics simulations, first-principles approaches, stochastic methods for optimization and sampling, and continuum elasticity theory. Examples will include problems in electronic and photonic devices, materials for energy conversion, storage, and environmental protection, and those related to mechanical strength of materials.

## Applied Mathematics

### **APMTH 201 Physical Mathematics I**

Course ID: 112798

Faculty:

Next Term Offered: 2016 Fall

Introduction to methods for developing accurate approximate solutions for problems in the sciences that cannot be solved exactly, and integration with numerical methods and solutions. Topics include: approximate solution of integrals, algebraic equations, nonlinear ordinary differential equations and their stochastic counterparts, and partial differential equations. Introduction to "sophisticated" uses of MATLAB.

### **APMTH 202 Physical Mathematics II**

Course ID: 143530

Faculty:

Next Term Offered: 2017 Spring

Theory and techniques for finding exact and approximate analytical solutions of partial differential equations: eigenfunction expansions, Green functions, variational calculus, transform techniques, perturbation methods, characteristics, integral equations, selected nonlinear PDEs including pattern formation and solitons, introduction to numerical methods.

### **APMTH 215 Fundamentals of Biological Signal Processing**

Course ID: 127196

Faculty:

Next Term Offered: 2017 Spring

The course will introduce Bayesian analysis, maximum entropy principles, hidden markov models and pattern theory. These concepts will be used to understand information processing in biology. The relevant biological background will be covered in depth.

## Applied Physics

### **APPHY 227 Landmark Papers in Soft Matter**

Course ID: 109668

Faculty:

Next Term Offered: 2018 Spring

A seminar course that will survey classical, landmark, papers in soft matter physics with a slight bias towards experimental works.

### **APPHY 235 Chemistry in Materials Science and Engineering**

Course ID: 124723

Faculty:

Next Term Offered: 2017 Spring

Select topics in materials chemistry, focusing on chemical bonds, crystal chemistry, organic and polymeric materials, hybrid materials, surfaces and interfaces, self-assembly, electrochemistry, biomaterials, and bio-inspired materials synthesis.

### **APPHY 275 Computational Design of Materials**

Course ID: 110087

Faculty:

Next Term Offered: 2018 Spring

This course will provide the background and an extensive set of examples showing how computational methods are applied to modern design of materials with desired functionality. The methods will span multiple length and time scales, including molecular dynamics simulations, first-principles approaches, stochastic methods for optimization and sampling, and continuum elasticity theory. Examples will include problems in electronic and photonic devices, materials for energy conversion, storage, and environmental protection, and those related to mechanical strength of materials.

### **APPHY 284 Statistical Thermodynamics**

Course ID: 131392

Faculty:

Next Term Offered: 2016 Fall

Basic principles of statistical physics and thermodynamics, with applications including: the equilibrium properties of classical and quantum gases; phase diagrams, phase transitions and critical points, as illustrated by the gas-liquid transition and simple magnetic models; Bose-Einstein condensation.

### **APPHY 292 Kinetics of Condensed Phase Processes**

Course ID: 134488

Faculty:  
Next Term Offered: 2018 Spring

Kinetic principles underlying atomic motions, transformations, and other atomic transport processes in condensed phases. Application to atomic diffusion, continuous phase transformations, nucleation, growth, coarsening and mechanisms of plastic deformation.

### **APPHY 293 Dislocations and Deformation Behavior of Materials**

Course ID: 143807

Faculty:  
Next Term Offered: 2018 Spring

Dislocations are fundamental defects in crystalline solids affecting deformation and crystal growth. The use of dislocations to establish constitutive behavior for the deformation of materials over a wide variety of stresses and temperatures, as well as in modeling stress distributions and interfacial reactions will be included.

### **APPHY 294HFRA Materials Science Seminar**

Course ID: 142180

Faculty:  
Next Term Offered: 2016 Fall

Special topics in materials science. Students must complete both parts of this course (parts A and B) within the same academic year in order to receive credit.

### **APPHY 295B Quantum Theory of Solids**

Course ID: 146948

Faculty:  
Next Term Offered: 2017 Fall

Theory of the electron liquid, Fermi liquid theory. Ferromagnetism of metals, BCS theory of superconductivity. Lattice models of correlated electrons: antiferromagnetism. Graphene: semi metals and quantum phase transitions. Non-fermi liquids in correlated metals.

### **APPHY 298R Interdisciplinary Chemistry, Engineering and Physics: Seminar**

Course ID: 144326

Faculty:  
Next Term Offered: 2018 Spring

Materials-related topics chosen from: Structure and Self-Assembly; Mechanical Properties; Surfaces and Interfaces; Biomaterials; Synthesis and Fabrication; Characterization Techniques; Soft Materials, and Complex Fluids.



## Astronomy

### **ASTRON 120 Stellar Physics**

Course ID: 125882

Faculty:

Next Term Offered: 2016 Fall

Stars are the basic building blocks of galaxies and are responsible for the nucleosynthesis of most of the elements. Topics include stellar structure; energy transport in stars; stellar atmospheres; astroseismology; nuclear fusion in stars; stellar evolution; nucleosynthesis of the elements; stellar death and supernovae; the degenerate remnants of stars; black holes. This course will make use of thermodynamics, statistical mechanics, and quantum mechanics, but will review these subjects as necessary.

### **ASTRON 189 Exoplanet Systems**

Course ID: 108130

Faculty:

Next Term Offered: 2017 Spring

A survey of the rapidly evolving field of exoplanets with the goal of equipping students with the ability to identify and pursue research questions. Topics include observational methods and instrumentation to detect and characterize exoplanets; properties of stellar hosts; formation and dynamical evolution of planetary systems; composition and physical structure of planets; planetary atmospheres; habitable zones and biosignatures.

### **ASTRON 193 Noise and Data Analysis in Astrophysics**

Course ID: 114603

Faculty:

Next Term Offered: 2017 Spring

How to design experiments and get the most information from noisy, incomplete, flawed, and biased data sets. Basic of Probability theory; Bernoulli trials; Bayes theorem; random variables; distributions; functions of random variables; moments and characteristic functions; Fourier transform analysis; Stochastic processes; estimation of power spectra: sampling theorem, filtering; fast Fourier transform; spectrum of quantized data sets. Weighted least mean squares analysis and nonlinear parameter estimation. Bootstrap methods. Noise processes in periodic phenomena. Image processing and restoration techniques. The course will emphasize a Bayesian approach to problem solving and the analysis of real data sets.

### **ASTRON 201A Stellar Astrophysics**

Course ID: 118266

Faculty: Alicia Soderberg

Next Term Offered: 2016 Fall

Stars are the basic building blocks of the universe, and they are responsible for the production of most elements via nucleosynthesis. This course covers the energy generation and transport in

stars, stellar atmospheres and radiative transfer, stellar evolution, and asteroseismology. The Sun and its heliosphere are also studied as the closest and best-studied examples of a star and its circumstellar plasma. This course also provides a brief survey of planetary astrophysics, including the dominant processes acting in the interiors and atmospheres of planets in our own solar system and in others.

### **ASTRON 201B Interstellar Medium and Star Formation**

Course ID: 118138

Faculty:

Next Term Offered: 2017 Fall

The interstellar medium (ISM) is the reservoir of gas and dust between stars. It is the nursery of new stars and planets, and the depository of energy and material from stellar winds and supernovae. This course will treat the often extreme physics and chemistry of the interstellar medium under its observed range of temperatures, densities, and radiation fields. It will cover the processes that govern the interactions between the ISM, stars and their host galaxies, including star and planet formation, and feedback from stellar deaths. The observational and laboratory methods and results that underpin the theories of interstellar environments will be highlighted.

### **ASTRON 231 Practical Optics for Astronomers**

Course ID: 109577

Faculty:

Next Term Offered: 2017 Spring

The primary goal of this course is to familiarize consumers of astronomical data with the fundamental physical principles that underlie the instruments that they use to gather data, as well as provide insight into the engineering constraints that bound the capabilities of available instruments. Topics will include first order optical design principles, the design of telescopes, cameras and spectrographs, as well as basic optical engineering principles and computer aided design.

### **ASTRON 251 Quantum Mechanics for Astrophysics**

Course ID: 118140

Faculty:

Next Term Offered: 2016 Fall

Quantum mechanics with applications to atomic and molecular processes important in astronomical environments. Atomic and molecular structure; spectroscopy (selection rules, oscillator strengths, photoionization); scattering theory (elastic, inelastic, approximate methods); line broadening; collision processes (cross sections, rate coefficients) involving electrons, ions, atoms, and molecules.

## Biological Sciences in Public Health

### **BPH 206 Advanced Respiratory Physiology**

Course ID: 108448

Faculty: James Butler

Next Term Offered: 2016 Fall

Respiratory measurements are an integral part of public health research. We will critically discuss their scientific bases, noting practical considerations and pitfalls, and their interpretations and inferences about physiological status and disease.

### **BPH 308QC Molecular Signals to Understand Exposure Biology**

Course ID: 127631

Faculty: Vishal Vaidya

Next Term Offered: 2017 Spring

This course will offer students a deeper understanding of molecular signals often termed, as "Biomarkers" that serve as highly useful tools for understanding the biology of the disease as well as nature and extent of human exposure from environmental contaminants and drugs. The course is divided in 4 modules: 1) Biomarker discovery, 2) Organ/Disease specific biomarkers, 3) Multiscale technologies for biomarker quantitation, and 4) Clinical and statistical considerations in biomarker research.

## Biomedical Engineering

### BE 153 **Bioelectromagnetics**

Course ID: 156945

Faculty:

Next Term Offered: 2017 Spring

This course will introduce bioelectricity and bioelectromagnetics starting with Maxwell Equations, which will quickly be simplified to the quasi-static form typically applicable in physiology. We will introduce the basics of membrane electrical biophysics, which we will use to study action potentials and action potential propagation. Applications will include electro-cardiograms (ECGs), electro-myograms (EMGs), electro-oculograms (EOGs), and electro-encephalograms (EEGs). EEG investigations will include analyses of spatial resolution as well as dynamic properties. A course project will allow students to choose an area of specific interest for more in-depth investigation and analysis. The content and course requirements are similar to Engineering Sciences153. Students may not take both courses for credit. Basic electromagnetism (Applied Physics 50b, Physics 11b or 15b, Physical Sciences 12b, or equivalent), basic vector calculus (Applied Math 21a or equivalent), basic differential equations (Applied Math 21bor equivalent).

Biostatistics

**BIOSTAT 291 Statistical Methods for Causality**

Course ID: 123923

Faculty: Andrea Rotnitzky

Next Term Offered: 2016 Fall

Theory of directed acyclic graph models. Identifiability of causal contrasts. Theory and applications of locally semiparametric efficient doubly-robust estimation in two models for counterfactual variables: marginal structural models and structural nested models.

## Celtic Languages and Literatures

### **CELTIC 101 The Hero of Irish Myth and Saga**

Course ID: 122419

Faculty:

Next Term Offered: 2017 Spring

A study of the ways in which the hero is represented in early Irish sources, especially in the saga literature. The texts reflect the ideology and concerns of a society which had been converted to Christianity, but continued to draw on its Indo-European and Celtic heritage. The biographies of the Ulster hero, Cú Chulainn, of his divine father, Lug, and of certain king-heroes are studied in depth. The wisdom literature, and archaeological and historical evidence will be taken into account.

### **CELTIC 106 The Folklore of Gaelic Scotland**

Course ID: 127369

Faculty: Natasha Sumner

Next Term Offered: 2017 Spring

An introduction to the oral traditions of Gaelic Scotland and Nova Scotia, including tales and song. The process of collecting is explored, and various folkloristic theories and approaches applied in order to gain a deeper understanding of the material. No knowledge of Scottish Gaelic required.

### **CELTIC 107 History of Ireland: Saint Patrick to the Flight of the Earls**

Course ID: 156008

Faculty:

Next Term Offered: 2017 Spring

This course will explore major themes in the first millennium of Irish history, from the coming of Christianity and the "Golden Age" of the Irish Church to the English invasions and the fall of Ireland's Gaelic civilization.

### **CELTIC 114 Early Irish Historical Tales**

Course ID: 122390

Faculty:

Next Term Offered: 2016 Fall

Introduction to early Irish story-material about legendary and historical persons and events. Attitudes to kingship and views of history in the tales are explored.

### **CELTIC 118 The Gaelic World: 1100 - 1700**

Course ID: 127370

Faculty: Natasha Sumner

Next Term Offered: 2016 Fall

An introduction to the history and culture of Gaelic Scotland and Ireland, with particular attention to contemporary sources, including Gaelic literary sources. All readings in English translation.

**CELTIC 119 The Gaelic World: 17th Century to the Present**

Course ID: 127371

Faculty: Natasha Sumner

Next Term Offered: 2016 Spring

An introduction to the later history and culture of Gaelic Scotland and Ireland, with particular attention to Gaelic literary sources. Language decline and revitalization efforts are also explored. All readings in English translation.

**CELTIC 137 Celtic Mythology**

Course ID: 111202

Faculty:

Next Term Offered: 2016 Fall

A survey of the sources for the study of Celtic mythology, with special attention to selected texts from early Ireland and Wales. All texts are read in English translation.

**CELTIC 151 Saints of the Celtic World**

Course ID: 120715

Faculty: Catherine McKenna

Next Term Offered: 2017 Spring

A study of selected texts associated with medieval saints' cults in Ireland, Wales, Brittany and Scotland, including saints' lives, voyage and vision narratives, hymns, prayers and poetry, in the context of the history of Christianity in the Celtic lands.

**CELTIC 194 The World of the Celtic Bard**

Course ID: 126775

Faculty: Catherine McKenna

Next Term Offered: 2016 Fall

This course explores the role of the bard in the Celtic-speaking societies of Wales, Ireland and Scotland. Through the study of narrative sources concerning the origin and nature of poets and poetry, theoretical and legal texts, and, most especially, bardic poems from the early Middle Ages through the eighteenth century, we examine the physical, public and political power of a medium-poetic verse-now associated with "power" in the private and emotional sense only. We study bardic poems in various modes - eulogistic, satiric, commemorative, prophetic - and we examine the circumstances that support the institution of bardic poetry and those that contribute to its decline. Among the issues to be considered are patronage, convention, the relationship of rhetoric and truth, and the functions of poetic form. All readings in English translation, but there will be some exposure to the forms of bardic poetry in the original languages.

**CELTIC 222 The Gaelic Manuscript Tradition**

Course ID: 127634

Faculty:

Next Term Offered: 2016 Fall

This course explores the central role of Gaelic manuscripts for Celtic Studies. We examine form, content and usage while also considering historical context. Practice with traditional and non-traditional Gaelic hands form an important part of this course. We cover a wide range of periods and Gaelic manuscript traditions; from the earliest Irish glosses to early modern Scottish and Irish manuscripts. Issues to be explored include: transmission, patronage, scribal practice and modern editorial methodology.

**IRISH 160R Advanced Modern Irish**

Course ID: 120282

Faculty: Natasha Sumner

Next Term Offered: 2016 Fall

Geared to the interests and aptitudes of the participants, this course enhances students' confidence in using Irish as a medium of oral and written communication and introduces them to the Gaelic literary tradition.

**IRISH 161R Continuing Advanced Modern Irish**

Course ID: 113909

Faculty: Natasha Sumner

Next Term Offered: 2017 Spring

Continuation of the fall term course.

**IRISH 204R Readings in Early Irish Poetry**

Course ID: 123862

Faculty:

Next Term Offered: 2016 Fall

Readings in selected texts.

**IRISH 205R Readings in Early Irish Prose**

Course ID: 111898

Faculty:

Next Term Offered: 2017 Spring

Readings in selected texts.

**SCTGALIC 130 Introduction to Scottish Gaelic**

Course ID: 111042

Faculty: Natasha Sumner

Next Term Offered: 2016 Fall

An introduction to Gàidhlig (Scottish Gaelic) as it is spoken and written today. This course surveys the grammar while also emphasizing practice in speaking the language. This class is highly participatory; students are encouraged to take part in a range of communicative activities which enhance oral/aural ability. Translation exercises develop skills in the written language. A range of audio/ audiovisual materials and online resources is used to support student learning.

**SCTGALIC 131R Intermediate Scottish Gaelic**

Course ID: 113999

Faculty: Natasha Sumner

Next Term Offered: 2017 Spring

Direct continuation of the fall term course Scottish Gaelic 130.

**WELSH 225A Medieval Welsh Language and Literature**

Course ID: 113537

Faculty: Catherine McKenna

Next Term Offered: 2016 Fall

Introduction to the language and culture of medieval Wales, with particular attention to narrative prose literature and its Celtic, Welsh and Norman contexts. By the end of the term we will have read in the original one of the *Four Branches of the Mabinogi* and selections from other texts.

**WELSH 225B Medieval Welsh Poetry**

Course ID: 113711

Faculty: Catherine McKenna

Next Term Offered: 2017 Spring

Continued readings in medieval Welsh prose and an introduction to Welsh poetry down to 1400. Continued study of grammar and practice in translation, as well as an introduction to the manuscript sources of the poetry and their cultural contexts, and the intricacies of medieval Welsh poetics.

## Chemistry and Chemical Biology

### **CHEM 117 Diversity-Oriented Synthesis**

Course ID: 115839

Faculty:

Next Term Offered: 2017 Spring

This course will cover reactions and strategies used in the synthesis of complex molecules. Special emphasis will be placed on reactions and strategies that are useful in diversity-oriented syntheses. Areas covered will include: conformational analysis, important C-C bond forming reactions, asymmetric synthesis, asymmetric catalysis, functional group manipulation, tandem reactions, multicomponent reactions, and strategies for ring formation. The application of diversity-oriented synthesis to the discovery of new reactions, catalysts, and molecules with novel biological properties will also be included.

### **CHEM 156 Chemistry of Positron Emission Tomography**

Course ID: 107812

Faculty:

Next Term Offered: 2017 Spring

This course will provide exposure to translational imaging from a unique chemical perspective. The focus of the course will be radiotracer chemistry but additional topics such as imaging physics, imaging equipment, and probe design based on biology, pharmacokinetics, and image analysis will be covered. Students will leave the course with working knowledge of radiotracer design and human translational imaging.

### **CHEM 158 Nanoscience and Nanotechnology**

Course ID: 121512

Faculty:

Next Term Offered: 2017 Spring

A survey of nanoscience and nanotechnology. Topics include: bottom-up versus top-down paradigms; synthesis and fabrication of zero-, one- and two-dimensional materials; physical properties of nanostructures, including electronic and optical properties; hierarchical organization in two and three dimensions; functional devices circuits and nanosystems; applications with emphasis on nano-bio interface and electronics.

### **CHEM 163 Frontiers in Biophysics**

Course ID: 116159

Faculty:

Next Term Offered: 2016 Fall

This course introduces the physical chemistry underpinnings of life processes, including thermodynamics, equilibrium and nonequilibrium statistical mechanics and chemical kinetics. These principles will be illustrated in the context of recent experimental advances, in particular single-molecule enzymology, molecular motors, live cell imaging, and stochastic gene expression.

Statistical analyses and numerical simulations of important biological processes will be covered throughout the course.

### **CHEM 190 Statistical Mechanics in Chemistry and Biology**

Course ID: 128016

Faculty:

Next Term Offered: 2016 Fall

This course will cover interdisciplinary aspects of Chemistry and Biology where Statistical Mechanics played a pivotal role. Topics include: Polymers in solution and condensed phases, equilibrium and dynamics of self-assembly -layers and micelles, protein folding, structure and bioinformatics, reaction dynamics on complex energy landscapes, dynamic and evolution of complex networks.

### **CHEM 205 Advanced Physical Organic Chemistry**

Course ID: 124545

Faculty:

Next Term Offered: 2017 Spring

An in-depth perspective on mechanistic organic chemistry, with analysis of fundamental organic and organotransition metal reaction mechanisms, reactive intermediates, catalysis, stereochemistry, non-covalent interactions, and molecular recognition. Classical and modern tools of physical-organic chemistry, including reaction kinetics, computer modeling, isotope effects, and linear free-energy relationships will be evaluated in the context of literature case studies.

### **CHEM 218 Advanced Semiclassical Methods for Quantum Mechanics**

Course ID: 156628

Faculty:

Next Term Offered: 2017 Spring

Semiclassical approaches to quantum systems provide both intuitive understanding of quantum processes and methods for calculations that are vastly simpler than full quantum mechanical simulations. Semiclassical methods are based on classical mechanics including interference and phases computed with classical actions. The course, based on a textbook being written by Prof. Heller (The Semiclassical Way to Quantum Mechanics) begins with a review of some salient features of classical physics, followed by an introduction to stationary phase integration and the Feynman Path Integral in the semiclassical limit, including time and energy domains, and the famous Trace Formula. This is followed by a number of widely useful techniques, such as generalized tunneling, applications to classically chaotic systems, semiclassical wave packet dynamics, WKB methods and uniformization. A number of "special topics" will then be taken up, including decoherence, certain forms of spectroscopy, and scattering theory of nanoscale devices.

### **CHEM 242 Quantum Mechanics for Physical Chemistry**

Course ID: 112103

Faculty:  
Next Term Offered: 2016 Fall

This course describes the quantum mechanics of molecules and their chemical reactions. We review fundamental principles: Hilbert spaces, operator algebra, Schrodinger, Heisenberg and interaction pictures. Quantum mechanics applied to the understanding of molecular structure, spectra, chemical bonds, and chemical reaction dynamics. Modern techniques for the manipulation of molecular internal and external quantum states.

### **CHEM 243 Applied Quantum Mechanics**

Course ID: 123989

Faculty:  
Next Term Offered: 2017 Spring

The course will cover the application of quantum mechanical principles to contemporary problems in chemistry and physics. The topics covered in the course will include: chemical bonding and the Born-Oppenheimer Approximation, atom/molecule-photon interaction (including second quantization and the dressed-state approach), Quantum Optics, and solid-state and nano-science (band theory, Fermi liquid theory, and electron transport).

### **CHEM 245 Classical, Quantum, and Semiclassical Dynamics and Scattering**

Course ID: 107871

Faculty:  
Next Term Offered: 2017 Spring

Semiclassical approaches to quantum systems provide both intuitive understanding of quantum processes and methods for calculations that are vastly simpler than full quantum mechanical simulations. Semiclassical methods are based on classical mechanics including interference and phases computed with classical actions. The course, based on a textbook being written by Prof. Heller (The Semiclassical Way to Quantum Mechanics) begins with a review of some salient features of classical physics, followed by an introduction to stationary phase integration and the Feynman Path Integral in the semi classical limit, including time and energy domains, and the famous Trace Formula. This is followed by a number of widely useful techniques, such as generalized tunneling, applications to classically chaotic systems, semiclassical wavepacket dynamics, WKB methods and uniformization. A number of "special topics" will then be taken up, including decoherence, certain forms of spectroscopy, and scattering theory of nanoscale devices.

### **CHEM 253 Modeling Matter at Nanoscale: An Introduction to Theoretical and Computational Approaches**

Course ID: 109114

Faculty:  
Next Term Offered: 2017 Fall

Essentials of modeling the structure of matter at the nanoscale. Material properties and connections to the mesoscale. Intended for advanced undergraduate students or beginning graduate students in Chemistry, Physics, Applied Physics and the Life Sciences.

## **CHEM 267 Surface and Interfacial Phenomena**

Course ID: 144246

Faculty:

Next Term Offered: 2017 Spring

General principles governing surface and interfacial phenomena are developed using treatment of surface electronic and geometric structure as a foundation. The course will treat both theoretical and experimental tools for the investigation of surface structure. Selected spectroscopic techniques will also be treated, with emphasis on surface phenomena. The latter part of the course will develop principles of absorption, reaction, and growth phenomena illustrated through current literature topics.

Classics, The

**GREEK K Advanced Greek Prose Composition**

Course ID: 113714

Faculty:

Next Term Offered: 2017 Spring

Composition in the prose style of various authors and genres, with selected readings representing the development of classical Greek prose and its analysis by scholars ancient and modern.

**GREEK 112B History of Greek Literature II**

Course ID: 119867

Faculty:

Next Term Offered: 2016 Spring

A survey of Greek poetry and prose with a focus on the development of narrative technique from the archaic through the classical, Hellenistic, and imperial periods. Close reading of selections in Greek with discussion of key narratological concepts and approaches. Topics include: the representation of temporality, time in relation to space, narrative voice, focalization, fictionality.

**LATIN 102 Catullus**

Course ID: 156312

Faculty:

Next Term Offered: 2016 Fall

Explores Catullus in his literary, historical and social contexts, with a focus on the revolutionary role he played in the Roman literary tradition.

**LATIN 104 Ovid's Metamorphoses**

Course ID: 156311

Faculty:

Next Term Offered: 2016 Fall

Ovid's witty, exuberant, and learned epic of change and mortality encompasses the history of the world from its creation to the apotheosis of Julius Caesar. This course examines the work's shaping of narrative and myth, its generic multiformity (embracing tragic, elegiac, comic, and pastoral motifs, as well as epic), and its equally complex vision of human existence.

## Comparative Literature

### **COMPLIT 227 Comparative Modernism**

Course ID: 127034

Faculty:

Next Term Offered: 2017 Spring

A survey of major works of modernist fiction in global context, going from early and 'high' modernism to late modernism and its aftermath, together with critical and theoretical readings on modernism and modernity. Readings in Baudelaire, Rilke, Lu Xun, Bely, Proust, Barnes, Kafka, Asturias, Zhang Ailing, Yourcenar, and Mishima.

### **COMPLIT 246 The Critic in Culture**

Course ID: 125149

Faculty:

Next Term Offered: 2017 Spring

This class will examine the interplay of scholarly analysis and cultural critique in a range of major modern critics and theorists, exploring their stylistic and essayistic strategies as they seek to find - or create - an audience for their ideas. Readings in Nietzsche, Foucault, Benjamin, Kobayashi, Woolf, Adorno, Barthes, Cixous, Said, Miyoshi, Minh-ha, Anzaldúa, Penley, and Agamben.

### **COMPLIT 248 American Multilingual Literature in a Transnational Context**

Course ID: 125818

Faculty:

Next Term Offered: 2017 Spring

This Longfellow Institute seminar works with original source materials in several different languages. Special focus is on the historiographic and critical treatment of non-Anglophone texts, on general and theoretical problems of an ongoing multilingual American tradition, on the recuperation and editing of texts, and on issues of translation.

### **COMPLIT 251 Literary Criticism and Theory: Antiquity to the Renaissance**

Course ID: 125841

Faculty:

Next Term Offered: 2017 Spring

An historical and critical examination of key issues and debates in poetic theory, rhetoric, and literary interpretation. Topics include mimesis, catharsis, expression, performance, allegoresis, typology, semiotics, hermeneutics, verisimilitude, genre, decorum, and the sublime.

### **COMPLIT 252 The Literatures of Medieval Iberia**

Course ID: 125848

Faculty:

Next Term Offered: 2017 Spring

The cultural interactions in premodern Spain between Muslims, Christians and Jews shaped the literary history of Arabic, Hebrew and the Ibero-Romance vernaculars. Our seminar examines selected scholarly debates on the comparative study of these literatures.

**COMPLIT 256 Archeology of Modernity and Visual Culture**

Course ID: 125845

Faculty:

Next Term Offered: 2017 Spring

Explores contradictions of the modern experience in literature, philosophy, arts and architecture. Topics for 2010: nostalgia and modernization, public freedom and cross-cultural memory, archeology and the creative mapping of the urban space, culture and politics. Special attention to the relationship between critical theory and creative practice. Reading from Benjamin, Simmel, Shklovsky, Nabokov, Kafka, Arendt, Certeau, Lyotard, Derrida.

**COMPLIT 261 Fragments of a Material History of Literature**

Course ID: 120029

Faculty:

Next Term Offered: 2017 Spring

Literary studies studied from the perspective of the practices that have shaped ideas concerning literature, writing, speech, and communication: from scrolls and codices to the rise of printing and typewriting to digital writing.

**COMPLIT 262 Aesthetics and Freedom**

Course ID: 125826

Faculty:

Next Term Offered: 2017 Spring

Examines philosophical, political, and aesthetic conceptions of freedom from French and American revolutions to postcommunism. Topics: aesthetic education and the space of freedom, the myth of America from a cross-cultural perspective, love, and modern ethics.

**COMPLIT 265 A World Lost, A World Regained: German Intellectuals in America**

Course ID: 127057

Faculty:

Next Term Offered: 2017 Spring

This course will investigate the fruitful yet traumatic encounter between Europe and America in the works of German émigrés to the United States in the twenties and thirties. What did they see, what did they fail to see and why.

**COMPLIT 281 Rhetoric, Imitation, Translation: Comparative Literature from Antiquity to Early Modernity**

Course ID: 109674

Faculty:

Next Term Offered: 2017 Spring

How can we think of comparative literature prior to the rise of aesthetics and "Weltliteratur" in the eighteenth century? From antiquity to early modernity, literary traditions were shaped by the rules of rhetoric, imitation, emulation, and translation. We will discuss works from Greek and Latin antiquity; the Latin, Hebrew, Arab, Persian, and Byzantine Middle Ages; and the revival of rhetoric, imitation, and translation in early modernity. Authors include Sappho, Aristotle, Cicero, Lucretius, Hermogenes, St. Jerome, Martianus Capella, Al-Farabi, Averroes, Leonardo Bruni, Isotta Nogarola, Hélienne de Crenne, Joachim Du Bellay, Gaspara Stampa, Jan Kochanowski.

**COMPLIT 294 Teaching World Literature World Literature in Theory and Practice**

Course ID: 108790

Faculty:

Next Term Offered: 2017 Spring

The study of world literature has achieved new prominence in recent years, and has fueled sometimes sharp debate in the process. What are the politics of teaching world literature today? With what relation to postcolonial studies, to globalization, world systems theory, translation theory, and classic comparative literature? This course will examine the uses and abuses of world literature in current teaching and scholarship, with theoretical and methodological readings in Moretti, Casanova, Spivak, Apter, Kadir, and others, paired with case studies from the modern era, from Molière and Chikamatsu Monzaemon to Derek Walcott and Bei Dao.

**COMPLIT 295 Frameworks in the Humanities: The Art of Listening**

Course ID: 108787

Faculty:

Next Term Offered: 2017 Spring

How do humanists across disciplines engage pertinent works in order to hone analytical and interpretive skills? This course will focus on "The Art of Listening," by addressing questions such as the distinction between hearing and listening and, ultimately, between sense and sensibility.

**COMPLIT 298 Allegory**

Course ID: 108896

Faculty:

Next Term Offered: 2017 Spring

Investigates major landmarks in the development of allegorization and allegorical literary composition in European tradition. Starting with pseudo-Herakleitos and his allegorical hermeneutics of the Homeric epics, this seminar will study different theoretical explorations and

literary manifestations of allegorical discourse from antiquity to modernity - from ancient Greek rhetoric to Prudentius to Byzantine literature to Dante to the Romantics to C. P. Cavafy to Benjamin and de Man. Topics to be addressed include: personification, ambiguity, hermeneutic double-tonguedness (amphoteroglosia), the interplay between allegory and other tropes and discursive modes (metaphor, metonymy, symbol, parody, satire).

## Computer Science

### COMPSCI 2 **Digital Platforms**

Course ID: 110259

Faculty:

Next Term Offered: 2017 Spring

The Internet operates in layers, and so does much of the technology that hooks up to it: PCs, mobile phones, tablets. Nearly two decades ago those platforms were conceptually simple: a "generative" base offered by one manufacturer, on which any third party could build. (Think: Windows and the programs that run on it.) Some efforts by platform makers to tip the scales in their favor in the layer above resulted in extended controversy and regulatory efforts, such as over Windows coming bundled with Internet Explorer. Today platforms are just as vital but far more complex. We have hybrids like the iOS and Android operating systems or the Facebook and Twitter platforms, where the platform makers offer their systems as services rather than products, influencing and sometimes outright limiting connection between users and independent developers for those platforms. How should we think about these new platforms? What counts as a "level playing field," and what responsibility, if any, is there for public authorities to enforce it? What lessons, if any, do the prior tangles offer for today?

### COMPSCI 90NA **The Internet: Governance and Power**

Course ID: 107862

Faculty:

Next Term Offered: 2017 Spring

This seminar will examine the individuals and institutions that control the Internet, and how the Internet affects the distribution and operation of power, broadly conceived. We will examine technologies of control (such as surveillance, censorship, propaganda, and use control) and of evading control, the individuals and institutions that seek to regulate the Internet (such as governments, the IETF, and hackers), the relationship between cybersecurity, national security, and Internet governance, the economics of Internet communications, and more.

### COMPSCI 96 **System Design Projects**

Course ID: 121508

Faculty:

Next Term Offered: 2017 Spring

Cooperative design, development, and testing of a sizable and realistic computer system. Students work as a group with a client on a real-world open-ended problem, and gain experience in problem definition, software development, and system lifecycle issues, and in the area of application. Students work in groups; both student participation in the classroom and effective group cooperation outside the classroom are stressed.

### COMPSCI 143 **Computer Networks**

Course ID: 118418

Faculty:

Next Term Offered: 2016 Fall

Networking has enabled the emergence of mobile and cloud computing, creating the most important technological paradigm shift in computing of the past decade. Further advancements in networking are expected to similarly transform the technological landscape over the next decade through the emergence of the Internet of Things and gigabit wireless networks. In order to play a role in this era of new network-powered advancements, students must have a thorough understanding of emerging networking topics. Rather than teaching the basic networking protocols, which have become very mature and can be treated as a black box, in CS 143, we will teach the new issues and topics of interest which will power important emerging applications. This focus on upcoming applications is the motivation for CS 143 this semester. The class will be organized into the following nine modules: Basic Networking Concepts: Protocol Layering; Internet of Things: All-service Bluetooth Low Energy (BLE); Data Center Networking: Software Defined Networking; Web-scale Networking: Distributed Cloud Computing and Virtual Machine Migration; Content Networks: Video Streaming; Network Security: Defense Against Protocol Exploitation; Wireless Networking: Wireless Mesh, Geographic Routing; Machine Learning Assisted Networking: End-to-end Application Adaptive Protocols; Cyber-physical Networks: Vehicular Networking. Students will have the opportunity to implement the concepts learned in the course through programming assignments, read and discuss the latest networking literature, and design and implement a final project.

### COMPSCI 146 **Computer Architecture**

Course ID: 113270

Faculty:

Next Term Offered: 2017 Spring

Review of the fundamental structures in modern processor design. Topics include computer organization, memory system design, pipelining, and other techniques to exploit parallelism. Emphasis on a quantitative evaluation of design alternatives and an understanding of timing issues.

### COMPSCI 164 **Software Engineering**

Course ID: 119247

Faculty:

Next Term Offered: 2017 Spring

Introduction to principles of software engineering and best practices, including code reviews, source control, and unit tests. Topics include Ajax, database schemas, event handling, HTTP, MVC, object-oriented design, and user experience. Projects include web apps with front-end UIs (mobile and desktop) and back-end APIs. Languages include JavaScript and PHP.

### COMPSCI 187 **Computational Linguistics**

Course ID: 117372

Faculty:

Next Term Offered: 2016 Fall

Watson is the world Jeopardy champion. Siri responds accurately to "Should I bring an umbrella

tomorrow?". How do they work? This course provides an introduction to the field of computational linguistics, the study of human language using the tools and techniques of computer science, with applications to a variety of natural-language-processing problems such as those deployed in Watson and Siri, and covers pertinent ideas from linguistics, logic programming, and statistical modeling. The course will include an experimental practicum component covering skills in technical writing and editing that should be of general use as well.

**COMPSCI 209R Advanced Projects in Data Science**

Course ID: 160439

Faculty:

Next Term Offered: 2016 Fall

Students will work in teams in a semester-long project to analyze complex data for a local client. Through this process, they will learn practical data science techniques as well as refine their communication skills.

**COMPSCI 222 Algorithms at the Ends of the Wire**

Course ID: 111994

Faculty:

Next Term Offered: 2016 Fall

Covers topics related to algorithms for big data, especially related to networks. Themes include compression, cryptography, coding, and information retrieval related to the World Wide Web. Requires a major final project.

**COMPSCI 223 Probabilistic Analysis and Algorithms**

Course ID: 114806

Faculty:

Next Term Offered: 2018 Spring

Probabilistic techniques and tools for the design and analysis of algorithms. Designed for all first-year graduate students in all areas.

**COMPSCI 224 Advanced Algorithms**

Course ID: 156211

Faculty:

Next Term Offered: 2016 Fall

Advanced algorithm design, including but not limited to amortization, randomization, online algorithms, graph algorithms, approximation algorithms, linear programming, and data structures.

**COMPSCI 225 Pseudorandomness**

Course ID: 115692  
Faculty:  
Next Term Offered: 2018 Spring

Efficiently generating objects that ``look random" despite being constructed using little or no randomness. Connections and applications to computational complexity, cryptography, and combinatorics. Pseudorandom generators, randomness extractors, expander graphs, error-correcting codes, hash functions.

### **COMPSCI 227R Topics in Cryptography and Privacy**

Course ID: 114490  
Faculty:  
Next Term Offered: 2017 Spring

Topics in cryptography and data privacy drawn from the theoretical computer science research literature. Focus for 2014-15: Differential Privacy -- a mathematical framework for privacy-preserving analysis of datasets, which enables aggregate computations while preventing the leakage of individual-level information.

### **COMPSCI 228 Computational Learning Theory**

Course ID: 113296  
Faculty:  
Next Term Offered: 2018 Spring

Possibilities of and limitations to performing learning by computational agents. Topics include computational models, polynomial time learnability, learning from examples and learning from queries to oracles. Applications to Boolean functions, automata and geometric functions.

### **COMPSCI 246 Advanced Computer Architecture**

Course ID: 127937  
Faculty:  
Next Term Offered: 2017 Spring

The contents and course requirements are similar to those of Computer Science 146, with the exception that students enrolled in Computer Science 246 are expected to undertake a substantial course project.

### **COMPSCI 250 Software Foundations**

Course ID: 156204  
Faculty:  
Next Term Offered: 2018 Spring

This course introduces concepts and techniques in the foundational study of programming languages, as well as their formal logical underpinnings. The central theme is the view of programs

and languages as formal mathematical objects about which precise claims may be made and proved. Particular topics include operational techniques for formal definition of language features, type systems, and program logics. The models and proofs are formalized using mechanical theorem provers.

### **COMPSCI 260R Projects and Close Readings in Software Systems**

Course ID: 110276

Faculty:

Next Term Offered: 2016 Fall

Modern software systems construction and analysis. Distributed systems; operating systems; networks; data centers; big data; emerging systems deployments. Close, careful reading of research papers and code, coupled with programming projects. Readability and programmability. Topic focus will change each offering. May be repeated for credit with instructor permission.

### **COMPSCI 261 Research Topics in Operating Systems**

Course ID: 143667

Faculty:

Next Term Offered: 2017 Fall

An introduction to operating systems research. Paper-based seminar course that introduces students to the state of the art in systems research through historical and quantitative lenses. Students will read and discuss research papers and complete a final research project.

### **COMPSCI 277 Geometric Modeling in Computer Graphics**

Course ID: 116855

Faculty:

Next Term Offered: 2017 Spring

Advanced seminar in computer graphics focusing on geometric representations and processing. Topics include: subdivision surfaces, surface parametrization, vector fields over surfaces, shape editing, shape matching and surface reconstruction.

### **COMPSCI 279 Research Topics in Human-Computer Interaction**

Course ID: 121985

Faculty:

Next Term Offered: 2017 Fall

The course covers major areas of inquiry and core research methods in Human-Computer Interaction including experimental design, statistical data analysis, and qualitative methods. Activities will include discussion of primary literature, a small number of lectures, assignments (design, execution and analysis of both lab-based and on-line experiments), and a research project. Special focus this year is on social computing and crowd-powered systems. Specifically, we will look at the design and analysis of systems, in which crowds of intrinsically motivated

volunteers contribute to meaningful and non-trivial human computation tasks as a byproduct of doing something that they are motivated to do anyway.

### **COMPSCI 280R Advanced Topics in Artificial Intelligence**

Course ID: 109283

Faculty:

Next Term Offered: 2017 Spring

Seminar course exploring research directions in artificial intelligence (AI), typically combining two or more of such areas as multi-agent systems, natural-language processing, machine learning, reasoning under uncertainty, representation systems. Topic for Spring 2015: Multi-agent systems teamwork and plan management.

### **COMPSCI 282R Decision-Making Under Uncertainty**

Course ID: 156936

Faculty:

Next Term Offered: 2016 Fall

The focus of the Spring 2015 course will be reinforcement learning, a framework for solving problems involving a sequence of decisions with uncertain outcomes. This course will cover the fundamental theory through readings of classic papers and build practical intuition through coding assignments. Topics will include Markov decision process and partially observable Markov decision processes, planning under uncertainty, model-free and model-based reinforcement learning, function approximation in reinforcement learning, and batch reinforcement learning.

### **COMPSCI 285 Multi-Agent Systems**

Course ID: 114492

Faculty:

Next Term Offered: 2017 Fall

Algorithmic, game-theoretic and logical foundations of multi-agent systems, including distributed optimization and problem solving, non-cooperative game theory, learning and teaching, communication, social choice, mechanism design, auctions, negotiation, coalitional game theory, logics of knowledge and belief, collaborative plans and social systems.

### **COMPSCI 288R Advanced Topics in Computer Vision**

Course ID: 110332

Faculty:

Next Term Offered: 2018 Spring

Seminar course exploring recent research in computer vision. Topics vary from year to year, typically including object recognition; activity recognition; and visual surveillance. Students read and present research papers and undertake a research project.



## Earth and Planetary Sciences

### **E-PSCI 51 Introduction to Planetary Materials and Earth Resources**

Course ID: 109527

Faculty: Stein Jacobsen

Next Term Offered: 2017 Spring

A comprehensive introduction to how the principles of mineralogy, phase equilibria, and the compositions of terrestrial and extraterrestrial materials are used to understand the evolution of the Earth and its resources. The course will discuss how we know that the Earth's crust has more than sufficient resources for its human population.

### **E-PSCI 109 Earth Resources and the Environment**

Course ID: 114664

Faculty: John Shaw

Next Term Offered: 2016 Fall

An overview of the Earth's energy and material resources. Following introductions to hydrocarbons, nuclear fuels, and other economically important ores, the course emphasizes methods used to exploit these resources and the environmental impacts of these operations. Topics include: coal and acid rain; petroleum, photochemical smog, and oil spills; nuclear power and radioactive hazards; alternative energies; metals and mining. Labs emphasize methods for discovering and exploiting resources, as well as environmental remediation approaches.

### **E-PSCI 136 Introduction to Ocean Circulation Physics**

Course ID: 110237

Faculty: Carl Wunsch

Next Term Offered: 2016 Fall

Introduction to the physical processes governing the large-scale circulation of the ocean. Emphasis on time-changing components, observational methods used, and a survey of basic methods of analysis and theory. Topics include sea level rise, oceanic heat transport changes, and smaller-scale physics.

### **E-PSCI 145 Introduction to Igneous Petrology and Petrogenesis**

Course ID: 121458

Faculty: Charles Langmuir

Next Term Offered: 2017 Spring

How igneous rocks form and reveal the processes and fluxes involved in the circulation of the solid Earth. The course begins with the essential elements of igneous petrology: rock description and nomenclature, mineralogy, phase diagrams, processes of melting and crystallization, trace elements. We then consider the formation of igneous rocks at modern igneous settings: spreading centers, convergent margins and ocean islands. We conclude with investigations of igneous phenomenon of the past, such as large igneous flood basalt provinces, anorthosites, komatites and the igneous history of the Moon.

### **E-PSCI 146 Ocean Ridges and the Earth System**

Course ID: 108000

Faculty: Charles Langmuir

Next Term Offered: 2017 Spring

Course will present our current knowledge of the ocean ridge system where two thirds of Earth's crust is continually being created. We will examine the progressive understanding of ocean ridges from a historical perspective, emphasizing the process of scientific discovery. Topics include melt generation in the mantle, magmatic processes in the crust, formation of ocean ridge topography, faulting and tectonics, hydrothermal systems, manifestations in the overlying water column, and the unique ecosystems associated with vents. Approaches must be inherently interdisciplinary, including geochemistry, geophysics, geology, hydrothermal systems, and biology. The place of the ocean ridge system within the overall Earth system will be emphasized.

### **E-PSCI 181 Historical Geobiology**

Course ID: 115331

Faculty: Andrew Knoll

Next Term Offered: 2016 Fall

A focused inquiry on the interactions of life and environment through geologic history. This term we will focus on mass extinctions, their causes and evolutionary consequences.

### **E-PSCI 182 Stratigraphy and Sedimentology**

Course ID: 126103

Faculty: Francis Macdonald

Next Term Offered: 2017 Spring

Techniques in interpreting paleo-environmental information from sedimentary rocks, covering grain-flow, carbonates, glacial deposits, terrestrial, marginal marine, and deep-sea environments, and culminating with cyclo-stratigraphy and basin dynamics.

### **E-PSCI 186 Low Temperature Geochemistry I: Introduction to biogeochemical cycles**

Course ID: 126174

Faculty: David Johnston

Next Term Offered: 2016 Fall

An introduction to low temperature biogeochemistry. We will focus on key biogeochemical elements and look to understand the linkages between the biosphere, atmosphere and hydrosphere. The course begins with a description of marine geochemistry (alkalinity and chemical fluxes) and works toward understanding isotopic fractionation and what it can tell us about the environment. We will explore biogeochemistry over a range of physical and temporal scales.

## **E-PSCI 187 Low Temperature Geochemistry II: Modern and ancient biogeochemical processes**

Course ID: 117399

Faculty: Ann Pearson

Next Term Offered: 2017 Spring

Introduction to biological and organic chemistry of the Earth's environment. Primary focus on formation, processing, and preservation of organic carbon, with emphasis on paleoenvironmental applications and on processes occurring at the molecular level. This class is intended to be taken in series with EPS 186.

## **E-PSCI 189 Analytical and Field Methods in Geobiology**

Course ID: 126669

Faculty: David Johnston

Next Term Offered: 2016 Fall

Introduction to geobiological research methods: We will learn low temperature geochemical techniques, light stable isotope mass-spectrometry, and other microbiology methods commonly used in geobiological research. The focus will be on the cycling of biogeochemical elements (O, C, S, and Fe) in marine sediments throughout Earth history. This is a lab-based course that will be complemented with lectures.

## **E-PSCI 202 Mechanics in Earth and Environmental Science**

Course ID: 124688

Faculty: James Rice

Next Term Offered: 2017 Spring

Introduction to the mechanics of fluids and solids, organized around earth and environmental phenomena. Conservation laws, stress, deformation and flow. Inviscid fluids and ocean gravity waves; Coriolis dominated large scale flows. Viscosity and groundwater seepage; convective cells; boundary layers. Turbulent stream flows; flood surges; sediment transport. Elasticity and seismic waves. Pore fluid interactions with deformation and failure of earth materials, as in poro-mechanics of consolidation, cracking, faulting, and landslides. Ice sheets and glacial flow mechanics.

## **E-PSCI 204 Global Seismology**

Course ID: 114669

Faculty: Miaki Ishii

Next Term Offered: 2016 Fall

Fundamental concepts used in seismology as a tool in studying the Earth's deep interior. Topics include stress/strain/elasticity theory, the seismic wave equation, ray theory, surface waves and normal modes, source theory, and inverse methods.

## **E-PSCI 207 Geochemical Oceanography**

Course ID: 112198  
Faculty: Daniel Schrag  
Next Term Offered: 2017 Spring

Topics in low-temperature geochemistry, oceanography, and climatology will be discussed. Students will read and present journal articles on relevant topics, and will rotate responsibility for leading discussions.

### **E-PSCI 230 Quantitative Analysis of Past and Present Climate**

Course ID: 160230  
Faculty: Peter Huybers  
Next Term Offered: 2016 Fall

This course has the goals of developing both a better understanding of climate and greater facility in quantitative analysis through exploration of data. Exploration is pursued through techniques including quantile regression, spectral analysis, singular value decomposition, and clustering methods, with focus on employing these in statistical model construction and hypothesis testing. Topics to be explored include glaciation, ocean circulation, and extremes in temperature and rainfall, with data variously drawn from sediment and ice cores, instrumental records from ships and weather stations, and satellite observations.

### **E-PSCI 231 Climate Dynamics**

Course ID: 119890  
Faculty: Eli Tziperman  
Next Term Offered: 2017 Spring

Climate and climate variability phenomena and dynamical mechanisms over multiple time scales, using dynamical system tools and a hierarchical modeling approach. Energy balance and greenhouse, El Niño, thermohaline circulation, abrupt climate change, millennial variability (DO and Heinrich events), glacial-interglacial cycles, warm past climates including the Pliocene (2-5 Myrs) and Eocene (50 Myrs). Needed background in stochastic and nonlinear dynamics will be covered.

### **E-PSCI 232 Dynamic Meteorology**

Course ID: 115633  
Faculty:  
Next Term Offered: 2016 Fall

The atmosphere understood as a fluid dynamical system. Observations of atmospheric motions related to weather and climate. Application of the equations of atmospheric dynamics to explaining phenomena such as jet streams, cyclones and fronts.

### **E-PSCI 241 Isotope Geochemistry and Processes of Planetary Evolution**

Course ID: 146721  
Faculty: Stein Jacobsen

Next Term Offered: 2017 Spring

The composition and the evolution of the Solar Nebula. Application of radiogenic and stable isotopes to study the processes of formation and evolution of planetary crusts, mantles, and cores.

### **E-PSCI 245 Petrological Approaches to Understanding the Earth's System**

Course ID: 125469

Faculty: Charles Langmuir

Next Term Offered: 2017 Spring

The course studies the igneous processes at spreading centers, convergent margins and hot spots, and explores their influences on mantle, crust, ocean and atmosphere and the constraints they provide for the plate tectonic geochemical cycle.

### **E-PSCI 247 Ocean Ridges and the Earth System**

Course ID: 110509

Faculty: Charles Langmuir

Next Term Offered: 2017 Spring

Course will present our current knowledge of the ocean ridge system where two thirds of Earth's crust is continually being created. We will examine the progressive understanding of ocean ridges from a historical perspective, emphasizing the process of scientific discovery. Topics include melt generation in the mantle, magmatic processes in the crust, formation of ocean ridge topography, faulting and tectonics, hydrothermal systems, manifestations in the overlying water column, and the unique ecosystems associated with vents. Approaches must be inherently interdisciplinary, including geochemistry, geophysics, geology, hydrothermal systems, and biology. The place of the ocean ridge system within the overall Earth system will be emphasized.

### **E-PSCI 255 Topics in Tropical Dynamics**

Course ID: 122551

Faculty: Zhiming Kuang

Next Term Offered: 2017 Spring

Research seminar on current problems in tropical dynamics. Students will read and present journal articles on relevant topics, and will rotate responsibility for leading discussions.

### **E-PSCI 262 Theoretical Seismology**

Course ID: 107767

Faculty: Miaki Ishii

Next Term Offered: 2016 Fall

Theoretical aspects of seismology with strong emphasis on global free-oscillation seismology. Topics include continuum mechanics, equations of motion, linearization, perturbation theory, elasticity &anelasticity, rotation &ellipticity, spheroidal &toroidal modes of the Earth, mode splitting,

and multiplet coupling.

**E-PSCI 266 Computational Tools in Seismology**

Course ID: 109414

Faculty: Miaki Ishii

Next Term Offered: 2017 Spring

Seminar course that investigates computational tools that are readily available. Students will select one to two techniques (e.g., receiver functions and focal mechanism determination), present the basis, current research using the technique(s), and lead the class through installation and application of the method.

**E-PSCI 269 Topics in Crustal Dynamics**

Course ID: 123083

Faculty: Brendan Meade

Next Term Offered: 2017 Spring

Research seminar on current problems of tectonics, faulting, and earthquake occurrence at the Pacific-North America plate boundary in California. Emphasis on the identification of extant problems that may be resolved with contemporary geologic, geophysical, and geodetic data analysis and process based modeling.

**E-PSCI 270 Advanced Structural Interpretation Methods**

Course ID: 108133

Faculty: John Shaw

Next Term Offered: 2017 Spring

Methods of interpreting complex geologic structures imaged in 2- and 3-dimensional seismic reflection data. Methods of integrated geologic and remote sensing data will be described. Students will complete independent projects analyzing seismic data on workstations.

**E-PSCI 272 Topics in Structural Geology**

Course ID: 115931

Faculty: John Shaw

Next Term Offered: 2016 Fall

Seminar course investigating recent advances in structural geology and exploration geophysics with applications in earthquake science and the petroleum industry. Specific topics vary each year offered.

**E-PSCI 281 Great Papers in Earth Sciences**

Course ID: 111685

Faculty: Peter Huybers

Next Term Offered: 2017 Spring

A survey and discussion of groundbreaking papers from across the Earth sciences.

**E-PSCI 282 New Views on the Tectonic Evolution of the Appalachians**

Course ID: 126142

Faculty: Francis Macdonald

Next Term Offered: 2016 Fall

Readings and discussions on current problems in stratigraphy and Earth history. Students will read and present journal articles on relevant topics, and will rotate responsibility for leading discussions.

## East Asian Languages and Civilizations

### **CHNSE 132A Advanced Conversational Cantonese**

Course ID: 156620

Faculty:

Next Term Offered: 2016 Fall

Spoken Cantonese for Advanced Cantonese speakers. Topics of this course include authentic texts from contemporary media sources, including news, films, and TV shows.

### **CHNSE 132B Advanced Conversational Cantonese**

Course ID: 156621

Faculty:

Next Term Offered: 2017 Spring

Continuation of Cantonese 132a.

### **CHNSE 166R Chinese in Humanities**

Course ID: 108397

Faculty: Jennifer Li-Chia Liu

Next Term Offered: 2016 Fall

Advanced language practice associated with authentic academic texts in humanities disciplines (e.g., art, literature, religious studies). May be offered independently in Chinese, or linked with an English-language content course.

### **CHNSE 280 Teaching Chinese as a Foreign/Second Languages**

Course ID: 109520

Faculty:

Next Term Offered: 2017 Spring

This course is designed to introduce students to the theory and practice of teaching Chinese as a foreign/second language. It seeks to help students gain an understanding of the current issues and research about Chinese language instruction in the US.

### **CHNSHIS 113 Society and Culture of Late Imperial China**

Course ID: 120602

Faculty: Michael Szonyi

Next Term Offered: 2017 Fall

This course is a survey of the social and cultural history of China from the Song to the mid-Qing (roughly from 1000 to 1800). The main topics discussed include urbanization and commerce; gender; family and kinship; education and the examination system, and religion and ritual. The main goal of the course will be to explore the relationship between social and cultural changes and

political and intellectual developments.

**CHNSLIT 268R Topics in Song and Yuan Literature: Seminar**

Course ID: 125600

Faculty: Stephen Owen

Next Term Offered: 2016 Fall

This term we will study the construction and aesthetics of Song lyric (*ci*).

**EABS 241 Major Issues in the Study of East Asian Buddhism**

Course ID: 125783

Faculty: Ryuichi Abe

Next Term Offered: 2018 Spring

A graduate seminar that critically examines major academic works in English on East Asian Buddhism. It is aimed at preparing EALC graduate students for their general examinations in the fields relevant to Buddhism.

**EASTD 121 Global Cities in East Asia**

Course ID: 146425

Faculty: Nara Dillon

Next Term Offered: 2016 Spring

This course examines urbanization and globalization in East Asia, focusing first on the development of Tokyo as a global city, then turning to the socialist cities of contemporary China, before concluding with an examination of uneven development in Southeast Asian cities. In each section of the course, we will examine how urbanization and globalization affect major social groups (in particular, entrepreneurs and women) who have both propelled and been marginalized by these processes.

**EASTD 129 The World of the Three Kingdoms: Seminar**

Course ID: 130238

Faculty: Xiaofei Tian

Next Term Offered: 2017 Spring

This course explores the appeal of the "Three Kingdoms," a dangerous and violent time, and examines the nostalgic construction of the world of the Three Kingdoms from medieval times through contemporary period, in the forms of fiction, poetry, plays, movies, TV series, video games, MVs and fan fiction. Using the concept of "nostalgia" as a point of entry, this class offers an account of the nuances in the phenomenon and sentiments of nostalgia about the Three Kingdoms in different periods throughout Chinese history, with emphasis on nostalgia as a historical emotion and a modern global condition.

**JAPNHIST 256 The Ise Shrines: Seminar**

Course ID: 109460

Faculty: Helen Hardacre

Next Term Offered: 2016 Fall

This seminar examines Shikinen Sengu, the practice of rebuilding the Ise Grand Shrines every twenty years, addressing these shrines' history, architecture, religious practices, and related topics. Course readings will be in English and Japanese.

**KORHIST 232R Selected Topics in Korean Studies: Seminar**

Course ID: 127763

Faculty: Sun Joo Kim

Next Term Offered: 2016 Fall

This course explores current historical research in the field of Korean studies by reviewing major publications in the field in Korean language.

**MANCHU 210B Introduction to Sources for Manchu Studies**

Course ID: 119671

Faculty: Mark Elliott

Next Term Offered: 2016 Fall

Research papers prepared on the basis of primary sources.

**MONGOLN B Elementary Written Mongolian**

Course ID: 123855

Faculty: Mark Elliott

Next Term Offered: 2019 Spring

Continuation of Mongolian A.

Economics

**ECON 1052 Game Theory and Economic Applications**

Course ID: 111817

Faculty:

Next Term Offered: 2016 Fall

Introduction to game theory and its economic applications with more rigor than in Economics 1051. Topics include extensive-form and strategic-form games, Nash equilibrium, subgame-perfect equilibrium, Bayesian equilibrium, and applications to long-term cooperation, auctions, bargaining, and mechanism design. Prerequisites for this course include Economics 1010a1, 1010a2, or 1011a, and Mathematics 21a. Some exposure to basic probability theory and simple proofs will be useful as well.

## Engineering Sciences

### **ENG-SCI 27 Design by Committee: Digital Interfaces for Collaborative and Participatory Design**

Course ID: 110209

Faculty:

Next Term Offered: 2016 Fall

This Seminar/Workshop will look into the design and technical challenges involved in the development of web based interfaces for collaborative and participatory design scenarios where more than one agents are involved. The designer in a sense is given the chance to design and experiment with the communication architecture and temporality of the design process itself. Students will be introduced to web technologies for front end and back end development [javascript, WebGL, nodeJS, MongoDB].

### **ENG-SCI 103 Spatial Analysis of Environmental and Social Systems**

Course ID: 120317

Faculty:

Next Term Offered: 2018 Spring

Introduces the fundamental statistical and mapping tools needed for analysis of environmental systems. Topics will be linked by environmental and social themes and will include GIS concepts; data models; spatial statistics; density mapping; buffer zone analysis; surface estimation; map algebra; suitability modeling. Students will acquire technical skills in both mapping and spatial analysis. Software packages used will include ArcGis. There will be guest lectures by researchers and practitioners who use GIS for spatial analysis.

### **ENG-SCI 109 Earth Resources and the Environment**

Course ID: 121463

Faculty:

Next Term Offered: 2016 Fall

An overview of the earth's energy and material resources. Following an introduction to hydrocarbons (oil, natural gas, and coal), nuclear fuels, and other economically important ores, the course will emphasize methods used to exploit these resources and the environmental impacts of these operations. Topics include: Coal and acid rain; petroleum, photochemical smog, and oil spills; unconventional fossil resources (shale gas, tar sands); nuclear power and radioactive hazards; alternative energies (solar, hydroelectric, tidal, geothermal power); metals and mining. Labs will emphasize geologic and geophysical methods for discovering and exploiting resources, including satellite remote sensing and seismic reflection techniques, and environmental remediation approaches.

### **ENG-SCI 159 Introduction to Robotics**

Course ID: 131554

Faculty:

Next Term Offered: 2016 Fall

Introduction to computer-controlled robotic manipulators. Topics include coordinate frames and transformations, kinematic structure and solutions, statics and dynamics of serial and parallel chain manipulators, control and programming, introduction to path planning, introduction to teleoperation, robot design, and actuation and sensing devices. Laboratory exercises provide experience with industrial robot programming and robot simulation and control.

### **ENG-SCI 161 Applied Environmental Toxicology**

Course ID: 156933

Faculty:

Next Term Offered: 2016 Fall

This course will examine the theory and practical application of environmental chemistry and toxicology for assessing the behavior, toxicity and human health risks of chemical contaminants in the environment. The goals of the course are to: (a) illustrate how various sub-disciplines in environmental toxicology are integrated to understand the behavior of pollutants; (b) demonstrate how scientific information is applied to inform environmental management decisions and public policy through several case studies; and (c) provide an introduction to the legislative framework in which environmental toxicology is conducted. This course will be directed toward undergraduate students with a basic understanding of chemistry and calculus and an interest in applied science and engineering to address environmental management problems.

### **ENG-SCI 169 Seminar on Global Pollution Issues: Case Study of Lead Biogeochemistry**

Course ID: 109341

Faculty:

Next Term Offered: 2017 Fall

This course provides a cross-disciplinary overview of environmental science and how research contributes to public policy and human health risk assessment through a case study of a global pollution issue: lead biogeochemistry. The scientific foundations of environmental research methods are discussed (i.e., analytical chemistry, ecology, use of environmental archives, environmental modeling). Experience conducting multidisciplinary environmental research and data analysis will be provided. Course Activities: Lectures, discussions, case studies, field/lab visits.

### **ENG-SCI 170 Applied Quantum Mechanics**

Course ID: 110015

Faculty:

Next Term Offered: 2017 Fall

Quantum mechanics provides not only an essential tool for engineers, material scientists and biologists to study and control objects in nano and atomic scales but also radical ways to do information processing, sensing, and fabrication. Advances in nanotechnology and quantum information processing raise growing interests in engineering students to learn applied quantum mechanics that is also essential for understanding modern devices and systems in electronics photonics. Topics of this course will cover topics ranging from solution of Schrodinger equation in quantum confined nano-structures and most recent topics such as quantum circuits and

entanglement. Examples, problems and numerical simulation are designed to address the applications of the course contents to real problems in semiconductor electronics, optoelectronics, photonics, quantum information processing and superconducting electronics.

### **ENG-SCI 175 Photovoltaic Devices**

Course ID: 110019

Faculty:

Next Term Offered: 2017 Spring

The course will provide an overview of the solid state device physics and p-n junction operation necessary to understand the operation. Several different solar architectures will be discussed including crystalline and amorphous silicon, multijunction, CdTe, CIGS, organic, dye sensitized as well as additional related topics light management, building integrated devices, and policy and economic issues relating to adoption.

### **ENG-SCI 198R Probability Applications in Social Engineering**

Course ID: 109400

Faculty:

Next Term Offered: 2018 Spring

Introductory statistical methods for students in the applied sciences and engineering with a focus on social networks. Random variables and probability distributions; the concept of random sampling, including random samples, statistics, and sampling distributions; role of statistics in social network analysis; mathematical interpretation of social networks; connections and homophily, propinquity, mutuality/reciprocity, multiplexity, network closure; distributions and bridges, distance, centrality, density; segmentation and cliques, cohesion, clustering; graph theory and adjacency matrices; Erdos-Rényi model; Watts-Strogatz Small World model; Barabási -Albert (BA) Preferential Attachment model; special topics in social network analysis.

### **ENG-SCI 201 Decision Theory**

Course ID: 131407

Faculty:

Next Term Offered: 2017 Spring

Mathematical analysis of decision making. Bayesian inference and risk. Maximum likelihood and nonparametric methods. Algorithmic methods for decision rules: perceptrons, neural nets, and back propagation. Hidden Markov models, Blum-Welch, principal and independent components.

### **ENG-SCI 203 Stochastic Control**

Course ID: 143872

Faculty:

Next Term Offered: 2018 Spring

Introduction to the theory of stochastic differential equations based on Wiener processes and

Poisson counters, and an introduction to random fields. The formulation and solution of problems in nonlinear estimation theory. The Kalman-Bucy filter and nonlinear analogues. Identification theory. Adaptive systems. Applications.

### **ENG-SCI 209 Nonlinear Control Systems**

Course ID: 131191

Faculty:

Next Term Offered: 2017 Fall

Study of nonlinear input-output systems including controllability, observability, uniqueness of models, stability, and qualitative behavior of nonlinear dynamical systems. Differential geometry and Lie theory methods developed to study control of classical and quantum mechanical systems.

### **ENG-SCI 211 Microphysiological Systems**

Course ID: 110220

Faculty:

Next Term Offered: 2017 Fall

A sophisticated perspective on the design, construction, and testing of model physiological systems recapitulated with tissue engineering and lab on a chip technologies. Topics include organ and multiorgan physiology and pathophysiology; in vitro disease models; and design tools and fabrication techniques for lab on a chip technologies.

### **ENG-SCI 212 Quantitative Cell Biology: Self-Organization and Cellular Architecture**

Course ID: 117376

Faculty:

Next Term Offered: 2017 Fall

Students are expected to meet all of the requirements of Engineering Sciences 142 and in addition are required to write a term paper with significant analytical and engineering emphasis.

### **ENG-SCI 226R Special Topics in Neural Engineering: Learning and Memory in Neural Systems**

Course ID: 124391

Faculty:

Next Term Offered: 2017 Spring

Course will present classical findings and new research that give insight into mechanisms of learning and memory formation in neural systems. Learning and memory will be studied both as neurobiological phenomena and as computational challenges.

### **ENG-SCI 228 Biomaterials**

Course ID: 128321  
Faculty:  
Next Term Offered: 2017 Spring

Overview of materials for biomedical devices and therapies. Polysaccharide- and protein-based polymers as building blocks. Biological templating of inorganic structures. Emerging frontiers in protein and DNA self-assembly. Molecular scale origin of materials properties for naturally occurring biological materials and the use of this information to rationally design new biomaterials for specific applications.

### **ENG-SCI 233A Innovating in Health Care**

Course ID: 109080  
Faculty:  
Next Term Offered: 2016 Fall

This course helps students to create successful entrepreneurial health care ventures by enabling them to: 1) Identify the alignment between an entrepreneurial health care venture and the six forces that shape health care - structure, financing, technology, consumers, accountability, and public policy; and 2) Create a product and business model that responds appropriately to any misalignments. The course covers four modules: The analytic framework, case studies of the six forces, case studies of firms responses to the forces, and student presentation of business plans.

### **ENG-SCI 233B Health Care Computer-Assisted Innovations**

Course ID: 109081  
Faculty:  
Next Term Offered: 2016 Fall

This is a field study course in which students undertake significant external research in the in-depth development of a business plan for a health-care and technology business venture. Students will learn to develop such a business plan, evaluate and select appropriate technologies, define a new technology based product in the health-care space, and develop appropriate prototypes for presentation to customers and investors.

### **ENG-SCI 238 Introduction to Innovation and Entrepreneurship**

Course ID: 110345  
Faculty:  
Next Term Offered: 2018 Spring

This course is designed for those who want to understand the role of start-ups and venture capital in the creation of new products and services in the for-profit and not-for-profit sectors. It is intended to help students identify areas in which changes in science and technology, consumer and social attitudes, or political and regulatory processes support the creation of new businesses and organizations in independent ventures or within established organizations. Margo Seltzer and Bill Anderson are supporting the course by supervising course projects in their respective areas of expertise.

### ENG-SCI 241 **Advanced Elasticity**

Course ID: 148181

Faculty:

Next Term Offered: 2017 Spring

Finite deformation; instabilities; thermodynamics; thermoelasticity; poroelasticity; electroactive polymers, hydrogels, polyelectrolyte gels

### ENG-SCI 242R **Solid Mechanics: Advanced Seminar**

Course ID: 142659

Faculty:

Next Term Offered: 2017 Spring

Finite elements for analysis and design. The key goal of this class is the application of the finite element method to classical and state-of-the-art modeling and design problems. We introduce a commercial finite element program - ABAQUS - and demonstrate how to use it in modeling and analysing design problems. Topics include the implementations of user-defined subroutines (UMAT and VUMAT), instability analyses, analysis of waves propagation, fluid-structure interactions.

### ENG-SCI 246 **Plasticity**

Course ID: 138370

Faculty:

Next Term Offered: 2016 Fall

Phenomenological theories for strain hardening materials; flow and deformation theories. Variational principles and other general theorems. Mechanisms of plastic deformation, physical theories for strain hardening materials, and polycrystals. Ideal plasticity. Boundary value problems, plastic collapse, buckling of structures.

### ENG-SCI 253 **Bioelectromagnetics**

Course ID: 156946

Faculty:

Next Term Offered: 2017 Spring

This course will introduce bioelectricity and bioelectromagnetics starting with Maxwell Equations, which will quickly be simplified to the quasi-static form typically applicable in physiology. We will introduce the basics of membrane electrical biophysics, which we will use to study action potentials and action potential propagation. Applications will include electro-cardiograms (ECGs), electro-myograms (EMGs), electro-oculograms (EOGs), and electro-encephalograms (EEGs). EEG investigations will include analyses of spatial resolution as well as dynamic properties. A course project will allow students to choose an area of specific interest for more in-depth investigation and analysis.

### **ENG-SCI 255 Statistical Inference with Engineering Applications**

Course ID: 117628

Faculty:

Next Term Offered: 2016 Fall

Statistical decision theory; hypothesis testing; linear and non-linear estimation; maximum likelihood and Bayes approaches; graphical models and message passing algorithms; large deviation analysis and asymptotic methods in statistics; stochastic processes and systems; Wiener and Kalman filtering; Markov chain Monte-Carlo methods; applications to physical, chemical, biological and information systems.

### **ENG-SCI 259 Advanced Introduction to Robotics**

Course ID: 134052

Faculty:

Next Term Offered: 2016 Fall

Course requirements are similar to Engineering Sciences 159, with the exception that students enrolled in Engineering Sciences 259 are required to prepare a term project analyzing current research in a specific problem area within Robotics.

### **ENG-SCI 260 Water and Economic Development**

Course ID: 110328

Faculty:

Next Term Offered: 2018 Spring

The course focuses on the engineering, infrastructure and institutions needed to manage water on a basin and city scale. The course does this using the case study method. All cases are presented by practitioners who have had deep engagement with the cases.

### **ENG-SCI 268 Chemical Kinetics**

Course ID: 114494

Faculty:

Next Term Offered: 2016 Fall

Time rate of change of chemical species. Rate constants. Formulating a coupled chemical system. Numerical analysis of complex systems.

### **ENG-SCI 269 Environmental Nanotechnology**

Course ID: 128163

Faculty:

Next Term Offered: 2017 Spring

Introduces students to the environmental aspects of nanoscience and nanotechnology. We will study the fundamental physical chemical properties, characterization, environmental implications,

and environmental applications of nanoparticles and nanomaterials. Case studies from recent publications on engineered carbon nanomaterials such as fullerenes, carbon nanotubes, and graphene will be discussed.

### **ENG-SCI 271R Topics in Mixed-Signal Integrated Circuits**

Course ID: 122855

Faculty:

Next Term Offered: 2016 Fall

A seminar course that reviews research and development of various topics in integrated circuits and systems for low-power and/or high-performance computing.

### **ENG-SCI 272 RF and High-Speed Integrated Circuits**

Course ID: 118027

Faculty:

Next Term Offered: 2017 Fall

Design of RF and high speed integrated communication circuits at both transistor and system levels.

### **ENG-SCI 274 Quantum Devices**

Course ID: 118028

Faculty:

Next Term Offered: 2018 Spring

Electronic structure of crystals. Semiconductor heterostructures: bandstructure engineering. Low-dimensional solids: quantum wells, wires and dots; superlattices; 2D electron gas; carbon nanotubes, nanowires, graphene. Tunneling and resonant tunneling, superlattice transport. Quantum point contacts. Interband and intersubband optical transitions. Quantum confined Stark effect. Device concepts (diodes, transistors, lasers). Quantum well lasers, modulators and detectors. Resonant tunneling devices. Quantum cascade lasers.

### **ENG-SCI 275 Nanophotonics**

Course ID: 120239

Faculty:

Next Term Offered: 2017 Fall

Recent developments in micro- and nano-photonic materials, devices and microscopy. Computational electromagnetics. Photonic crystals. Optical properties of metal nanostructures. Optical forces. Scanning near-field optical microscopy. Term-long research project.

### **ENG-SCI 289 Innovation and National Security**

Course ID: 156513

Faculty:

Next Term Offered: 2017 Fall

This course will ask if the US defense industrial complex facilitates victory by technological innovation. We define defense technologies in three categories: 1) Convenience Technologies, 2) Sustainability Technologies, and 3) Decisive Technologies. If we define Decisive Technologies as those technologies that are strategically managed and tactically deployed, the last century may have seen only two: radar and the atomic bomb. We will debate money as a weapon system and whether or not it is a valid weapon technology. We will examine technologies introduced during the Global War on Terror (GWOT) and ask which category they fall in, if they were a true technological innovation, and if they facilitated victory in a battle vs war. We will discuss barriers to innovation and technological surprise on the battlefield.

## Environmental Science and Public Policy

### **ESPP 78 Environmental Politics**

Course ID: 112610

Faculty: Sheila Jasanoff

Next Term Offered: 2016 Fall

An introduction to the history, organization, goals, and ideals of environmental protection in America. Examines the shifts in emphasis from nature protection to pollution control to sustainability over the past hundred years and develops critical tools to analyze changing conceptions of nature and the role of science in environmental policy formulation. Of central interest is the relationship between knowledge, uncertainty, and political or legal action. Theoretical approaches are combined with case studies of major episodes and controversies in environmental protection.

### **ESPP 90A Energy, Technology, and the Environment**

Course ID: 122474

Faculty: Michael McElroy

Next Term Offered: 2016 Fall

The seminar will provide an account of the technologies that shape our world with a perspective on how they evolved, the benefits that ensued and the environmental challenges that arose as a consequence. Topics include prospects for renewable energy and options to minimize damage from conventional sources of energy. Specific attention is directed to challenges faced by large developing economies emphasizing the need for a cooperative approach to ensure an equitable, environmentally sustainable, global future.

### **ESPP 90S The Technology, Economics, and Public Policy of Renewable Energy**

Course ID: 127572

Faculty: George Baker

Next Term Offered: 2017 Spring

Energy is the lifeblood of economic activity, and there is little prospect of this changing. However, the planet's stores of easily accessed fossil fuels are limited, and the climatological cost of continuing to rely on fossil fuels is high. This course examines the long run and short run prospects for renewable energy. We start by understanding the technology of hydro, solar, wind, and biomass. We then examine the economics of these technologies, and how subsidies and taxes affect their viability. Special attention will be paid to the interaction of technology, economics, and public policy.

### **ESPP 90V Economic Evaluation of Environmental Regulation**

Course ID: 108720

Faculty:

Next Term Offered: 2016 Fall

What level of environmental protection is best? Stronger regulations provide greater protection

against the target harm, but generally at the cost of reduced economic consumption or increases in other environmental harms. What principles can be used to determine the `right' level of protection, and how can regulations be evaluated? This course provides an introduction to environmental risk assessment and benefit-cost analysis of environmental regulation, incorporating theory and case studies.

## Folklore and Mythology

### **FOLKMYTH 90H Hero and Trickster**

Course ID: 126119

Faculty: Deborah Foster

Next Term Offered: 2017 Spring

Human imagination has conjured two enduring mythic characters that create habitable worlds for people in stories from cultures all over the world. Sometimes branded Hero, sometimes Trickster, these two share traits and antics, yet they seem to endorse fundamentally different values. This seminar examines both hero and trickster in several cultural contexts, comparing them with each other and with their correlates worldwide, primarily in oral traditions, but also where each has migrated to other media.

### **FOLKMYTH 106 History of Witchcraft and Charm Magic**

Course ID: 109652

Faculty: Stephen Mitchell

Next Term Offered: 2017 Spring

This course examines witchcraft (and the "magical world view") from cross-cultural, historical, and literary perspectives. Although witches and witchcraft are considered in their non-Western settings, the course focuses on the melding of Christian and pagan views of witchcraft and magic in the European Middle Ages, and the evolving construction of witchcraft ideologies through the witch crazes of the sixteenth and seventeenth centuries to the rise of modern paganism.

### **FOLKMYTH 114 Embodied Expression/Expressive Body: Dance in Cultural Context**

Course ID: 122863

Faculty: Deborah Foster

Next Term Offered: 2016 Fall

An examination of the ways in which the dancing body internalizes and communicates cultural knowledge to both dancer and observer. By participating in dance workshops, watching dance performances (live and on film), and reading ethnographic and theoretical texts, we attempt to understand the emergent meaning of dance performances from multiple perspectives.

### **FOLKMYTH 171 Chinese New Year Pictures: Folk Art and Visual Culture**

Course ID: 127144

Faculty: Felicity Lufkin

Next Term Offered: 2016 Fall

The colorful woodcut prints now commonly known as New Year pictures or *nianhua* are one of China's best known folk arts, thriving into the 20th c. We will look at how these prints were made and distributed, the roles they played in everyday life, and what they can tell us about the interactions of high and low, rural and urban, and tradition and modernity within Chinese culture and art.

**FOLKMYTH 174 Chinese Folk Arts**

Course ID: 127862

Faculty: Felicity Lufkin

Next Term Offered: 2016 Fall

This course will introduce several types of Chinese (visual) folk art. We will consider them comparatively, and pay special attention to the position of folk art in contemporary Chinese society.

## General Education

### **AESTHINT 11 Poetry Without Borders**

Course ID: 125186

Faculty: Stephanie Sandler

Next Term Offered: 2016 Fall

Studies contemporary poetry as a cultural practice that requires and perversely challenges visual, linguistic, geographic, and aesthetic borders. Main topics are translation (poems crossing borders), emigration/exile (poets crossing borders), and poetry and other arts (poems with music, film, photography). Texts by Charles Bernstein, Allen Ginsberg, Bei Dao, Joseph Brodsky, Paul Celan, Barbara Guest, Susan Howe, Yang Lian, Valzhyna Mort, Henry Parland, Vladimir Nabokov, W. G. Sebald, César Vallejo, Zafer Şenocak, and C. D. Wright, alongside sound recordings, photographs, films, and poetry performances.

### **AESTHINT 12 Poetry in America**

Course ID: 125187

Faculty: Elisa New

Next Term Offered: 2016 Fall

Surveying 300+ years of poetry in America, from the Puritans to the avant-garde poets of this new century, the course covers individual figures (Poe, Whitman, Dickinson, Frost, Williams, Hughes), major poetic movements (Firesides, Modernist, New York, Confessional, L-A-N-G-U-A-G-E) and probes uses of poetry across changing times. Who, and what, are poems for? For poets? Readers? To give vent to the soul? To paint or sculpt with words? Alter consciousness? Raise cultural tone? Students will read, write about and also recite American poems.

### **AESTHINT 15 Elements of Rhetoric**

Course ID: 124923

Faculty: James Engell

Next Term Offered: 2017 Spring

Rhetorical theory, originating with Aristotle, in contemporary applications. The nature of rhetoric in modern culture; practical examples drawn from American history and literature 1765 to the present; written exercises and attention to public speaking; the history and educational importance of rhetoric in the West; stresses theory and practice as inseparable.

### **AESTHINT 16 Openings: The Illuminated Manuscript**

Course ID: 125491

Faculty: Jeffrey Hamburger

Next Term Offered: 2016 Fall

In an age of mechanical \$ and now virtual \$ reproduction, we have lost sight of the basic visual unit that structures our experience of the book: the opening. Employing old and new technologies, this course focuses on medieval books, their decoration and their readers in the Middle Ages (ca. 300\$1500), when the book as we have known it, along with allied institutions, such as the university

itself, first came into being.

**AESTHINT 20 Poems, Poets, Poetry**

Course ID: 116873

Faculty: Helen Vendler

Next Term Offered: 2016 Fall

A study of poetry as the history and science of feeling: readings in major lyric poems of England and America. Emphasis on problems of invention and execution, and on the poet's choice of genre, stance, context, and structure. Other topics to be raised include the process of composition, the situating of a poem in its historical and poetic contexts, the notion of a poet's development, the lyric as dramatic speech, and the experimental lyric of the 20th century.

**AESTHINT 21 Virgil's Poetry and its Reception**

Course ID: 120703

Faculty: Richard Thomas

Next Term Offered: 2017 Spring

A study the poetry of Virgil, his interaction with Homeric and other Greek poetry, and with attention to the literary, artistic, and musical traditions that flow from his work, throughout the history of western literature. Major focus on the *Aeneid* in its artistic, historical and political contexts, its reception by Dante, Milton, Eliot, and others. Readings of Virgil's *Eclogues* and *Georgics*, and on their place in the traditions of European pastoral and lyric, from Spenser to Tennyson to Heaney. Aims to provide an understanding of important literary and cultural achievements of the last two millennia. All readings in English.

**AESTHINT 26 Race, Gender, and Performance**

Course ID: 122277

Faculty: Robin Bernstein

Next Term Offered: 2016 Fall

Introduction to performance studies as it intersects with studies of gender, sexuality, and race. What does it mean to say gender is "performed"? How does performance - both on- and offstage - construct and deconstruct power? Topics include transgressive and normative gender, feminist and queer theatre, athletics, gender in everyday life, drag, AIDS, and weddings. Texts include Eve Ensler, Ntozake Shange, Judith Butler, Anna Deavere Smith, Cherríe Moraga, David Henry Hwang, Bertolt Brecht, Guillermo Gómez-Peña.

**AESTHINT 30 Love In A Dead Language: Classical Indian Literature and Its Theorists**

Course ID: 123914

Faculty: Parimal G. Patil

Next Term Offered: 2017 Spring

An exploration of love in five genres of classical South Asian literature\$epic history, story literature,

plays, poetic miniatures, and court poetry. We will pay particular attention to the nature of literary genres and practices and how they were theorized by South Asian intellectuals. Especially relevant are theories of poetic language, aestheticized emotion (especially love), and literary ornamentation.

### **AESTHINT 31 American Musicals and American Culture**

Course ID: 123328

Faculty: Carol Oja

Next Term Offered: 2017 Spring

During much of the 20th century, the Broadway musical stood at the center of American culture, producing tunes and tales that became the hits of their day. It commented wittily, satirically, relentlessly on the ever-shifting social and political landscape, with subjects ranging from new immigrants to poverty, power, westward expansion, and issues of race. This course explores the musical artistry and cultural resonances of a cluster of iconic Broadway musicals on stage and screen, including *Shuffle Along*, *Show Boat*, *Stormy Weather*, *The Cradle Will Rock*, *Oklahoma!*, and *Pacific Overtures*. Readings focus on primary sources drawn from Harvard's illustrious Theatre Collection.

### **AESTHINT 41 How and What Russia Learned to Read: The Rise of Russian Literary Culture**

Course ID: 122819

Faculty: William Todd

Next Term Offered: 2017 Spring

A study of the emergence of a secular literary tradition in the Russian imperial period. Focus on cultural institutions (religion, art, literature), issues of the aesthetic and social critique, and problems of interpretation for contemporary and modern readers. Analysis of novels by Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, and Tolstoy.

### **AESTHINT 43 Visual Culture of the Ottoman Empire Between East and West (15th-17th Centuries)**

Course ID: 109449

Faculty: Gulru Necipoglu-Kafadar

Next Term Offered: 2017 Spring

Examines the visual culture of the Ottoman Empire straddling three continents (Asia, Europe, Africa), together with cross-cultural artistic interactions with Western and Asian Islamic courts (Safavid Iran, Mughal India). Ottoman urbanism, architecture, miniature painting and decorative arts studied in their socio-political contexts that informed their production and reception. The selective fusion of Ottoman-Islamic, Byzantine and Italian Renaissance elements in the codification of a distinctive visual tradition that helped processes of multicultural empire building and identity formation is analyzed. Earliest representations of the East by European artists working in the "Orientalist" mode are also considered.

### **AESTHINT 47 Forbidden Romance in Modern China**

Course ID: 127928  
Faculty: David Der-Wei Wang  
Next Term Offered: 2017 Spring

This course introduces a unique dimension of Chinese modernity: amorous engagement in fiction and lived experience, its discursive and visual representations, and its institutional implementation (gender, marriage, family, law, nation/state, etc.), censorship, and transgression. It examines how the modern lure of free will and emancipated subjectivity drove Chinese to redefine terms of affect, such as love, feeling, desire, passion, sexuality, loyalty, dedication, revolution and sacrifice. It also looks into how the moral, legal and political consequences of affect were evoked in such a way as to traverse or fortify consensual boundaries and their manifestations.

### **AESTHINT 49 The Medieval Imagination: Visions, Dreams, and Prophecies**

Course ID: 121952  
Faculty: Nicholas Watson  
Next Term Offered: 2016 Fall

The medieval imagination was the ambiguous mediator between the world and the mind: a mental space in which either prophetic truths or dreams and diabolic deceptions might be experienced, in which material and spiritual realities were reflected as in a mirror, and in which those complex constructs we call "fictions" found their source. This course investigates dream poetry and visionary writing in the context of medieval psychological theory. Texts to be read include Boethius's *Consolation of Philosophy*, *The Romance of the Rose*, Dante's *Divine Comedy*, John of Morigny's *Book of Flowers*, and works by Augustine, Julian of Norwich, and others.

### **AESTHINT 50 Literature and Medicine**

Course ID: 127015  
Faculty: Karen Thornber  
Next Term Offered: 2017 Spring

Examines the relationship between literature and medicine through creative texts that question understandings, shatter binaries, and reconceptualize notions of normality/disability, health/disease, and life/death. Pays particular attention to the work of physician-writers and narratives by patients.

### **AESTHINT 51 The Cosmos of the Comedy**

Course ID: 127022  
Faculty: Jeffrey Schnapp  
Next Term Offered: 2016 Fall

This course provides an in-depth exploration of Dante Alighieri's 14th-century masterpiece, the *Divine Comedy*, from the standpoint of the history of Western poetry, language, religious belief, geography and science. Particular attention is paid to Dante's dialogue with ancient authors such as Plato, Aristotle, Virgil and Ovid, as well as to imaginative mappings of Hell, Purgatory and Paradise. One of the course's highlights is a multimedia web-based competition in which all enrolled students compete for the annual Bedeviled Harvard prize.

**AESTHINT 52 Repression and Expression: Sexuality, Gender, and Language in Fin-de-siècle Literature and Art**

Course ID: 108160

Faculty: Peter Burgard

Next Term Offered: 2017 Spring

Examines German and Austrian art and literature of the Turn-of-the-Century (c. 1880-1920) with a focus on the dominant topics of sexuality, gender, and language that are articulated theoretically in the work of Nietzsche and Freud and insistently exemplified thematically and formally in both the art and literature of the age. The examination of this period, these theories, this art, and this literature serves the primary purpose of developing skills in the interpretation of literary texts and the plastic arts, as well as exploring the possibilities and productivity of bringing these arts and the interpretation of them to bear on one another.

**AESTHINT 55 Shakespeare, The Early Plays**

Course ID: 108455

Faculty: Marjorie Garber

Next Term Offered: 2016 Fall

The early comedies, tragedies, and histories, considered in the context of the origins of the English stage and the conventions of Elizabethan drama. Particular attention paid to Shakespeare's development as a dramatist, and to poetic expression, thematic design, stagecraft, and character portrayal in plays.

**AESTHINT 56 Shakespeare, The Later Plays**

Course ID: 109398

Faculty: Marjorie Garber

Next Term Offered: 2017 Spring

The late comedies, tragedies, and romances, with some attention to the prevailing literary traditions of the Jacobean period. Particular attention paid to Shakespeare's development as a dramatist, and to poetic expression, thematic design, stagecraft, and character portrayal in the plays.

**AESTHINT 58 Modern Art and Modernity**

Course ID: 108950

Faculty: Ewa Lajer-Burcharth

Next Term Offered: 2016 Fall

The course examines the defining moments in the development of modern European and American art from the eighteenth- through to the twentieth-century. Anchored by a significant date, each lecture focuses on the relationship between a major artistic event and the social, political, cultural, and technological conditions of its emergence. A wide range of media, from painting, sculpture, and print-making to photography, photomontage, video, installation, and performance art, will be considered. Situating the key aesthetic transformations that defined art's modernity in a broader

historical context, the course explores the fundamental role of advanced forms of artistic practice in the formation of modern culture and society.

**AESTHINT 59 Nazi Cinema: The Art and Politics of Illusion**

Course ID: 108580

Faculty: Eric Rentschler

Next Term Offered: 2016 Fall

As thinking beings we consider the limits of human potential and wonder what is the worst. The Nazis obsess us because they were masters of extremity who brought to the world unprecedented violence, destruction, and murder. They were also masters of propaganda who engineered sophisticated techniques of mass manipulation; in this endeavor cinema and modern media assumed a seminal role. This course considers why films proved to be so essential to the Hitler regime and so captivating to German audiences of the Third Reich. It also reflects on the continuing allure of Nazi sights and sounds for contemporary mass culture.

**AESTHINT 61 The Romance: From Jane Austen to Chick Lit**

Course ID: 122667

Faculty: Linda Schlossberg

Next Term Offered: 2017 Spring

A critical investigation of the genre's enduring popularity, beginning with Austen's satirical *Northanger Abbey* and three novels credited with providing narrative templates for contemporary romances (*Pride and Prejudice*, *Jane Eyre*, *Wuthering Heights*). We will then read twentieth-century revisions of these works (*Rebecca*, *Wide Sargasso Sea*, *Bridget Jones's Diary*). Topics: the female writer and reader/consumer of literature; moral warnings against romance, "sensation," and titillation; the commodification of desire; Harlequins; the relationship between high culture and low.

**CULTBLF 13 The Contested Bible: The Sacred-Secular Dance**

Course ID: 125217

Faculty: Jay Harris

Next Term Offered: 2017 Spring

A short history of the Bible. Questions addressed include how the Bible became a book, and how that book became sacred; the advantages and burdens of a sacred text; Jewish-Christian disputations; how interpretive efforts helped create and reinforce powerful elites; how that text became the object of criticism; and how the Bible fared after the rise of criticism.

**CULTBLF 14 Human Being and the Sacred in the History of the West**

Course ID: 125198

Faculty: Sean Kelly

Next Term Offered: 2016 Fall

A culture's understanding of what it is to be human interacts with its understanding of what is

sacred. Great works of art in the culture typically reflect or articulate these notions. This course will explore the themes of human being and the sacred as they are manifested in some of the greatest works in the history of the West. Readings chosen from among Homer, Aeschylus, Virgil, the New Testament, Augustine, Dante, Luther, Pascal, Kant, Melville, and others.

### **CULTBLF 17 Institutional Violence and Public Spectacle: The Case of the Roman Games**

Course ID: 117011

Faculty: Kathleen Coleman

Next Term Offered: 2016 Fall

Gladiatorial combat, beast fights, staged hunts, mock naval battles, and exposure of criminals to wild animals were defining features of the culture of ancient Rome. Examining texts and images from across the Roman world, this course seeks to identify and probe the values, attitudes, and social, political, and economic factors that contributed to the popularity of institutionalized violence as public entertainment for six hundred years from the Punic Wars until the Christianization of the Empire.

### **CULTBLF 19 Understanding Islam and Contemporary Muslim Societies**

Course ID: 108890

Faculty: Ali S. Asani

Next Term Offered: 2017 Spring

The course is an introduction to the fundamental concepts of Islam and the role that religious ideas and institutions play in Muslim communities around the world. Its main concern is to develop an understanding of the manner in which diverse notions of religious and political authority have influenced Muslim societies politically, socially and culturally. Through specific case studies of countries such as Saudi Arabia, Iran, Turkey, Egypt, Pakistan, and Afghanistan, the course considers the role played by ideologies such as jihad, colonialism, nationalism, secularism, and globalization in shaping the ways in which Muslims interpret and practice their faith today. The course briefly considers the contemporary situation of Muslim minorities in Europe and the United States. The course, through on-campus and on-line options, allows those enrolled to engage with students from all over the world.

### **CULTBLF 20 Reason and Faith in the West**

Course ID: 123064

Faculty: Ann Blair

Next Term Offered: 2017 Spring

Examines from an historical perspective one of the central themes in the Western intellectual tradition: the desire to reconcile rational philosophy with religious and biblical authority. Discusses the transformations in conceptions of reason, science, biblical interpretation, and divine intervention (among other themes) in the context of the long period of change from medieval to modern. Readings emphasize primary sources including, for example, Augustine, Aquinas, Galileo, Descartes, Newton, and Darwin.

**CULTBLF 21 Pathways through the Andes - Culture, History, and Beliefs in Andean South America**

Course ID: 123735

Faculty: Thomas Cummins

Next Term Offered: 2017 Spring

This course explores the arts and cultures of Andean South America from the Pre-Columbian through Colonial periods. Emphasis is on the place of objects—textiles, ceramics, sculptures, and books—in the construction of meanings, identities and values as these changed over time. Readings are drawn from archaeology, ethnohistory, ethnology, art history and original sources. Students will work with Pre-Columbian and Colonial Andean artifacts in the collections of the Peabody Museum.

**CULTBLF 25 Studying Buddhism, Across Place and Time**

Course ID: 125085

Faculty: Janet Gyatso

Next Term Offered: 2016 Fall

This class studies the basic elements of Buddhist thought, practice, and historical communities, and their vision of human flourishing. We will study Buddhist classic writings as well as later works from South, Central and East Asia on meditation, discipline, and creativity. Key themes of our readings are the relationship between self and other, the education of the emotions, paths of self-cultivation, and the (im)possibility of perfection. We will be especially attentive to how the approach to such things has shifted as Buddhism spread through Asia, and more recently to the rest of the world, as received by the 19th century Transcendentalists, the Beat poets, and socially engaged religion. Throughout the course we will consider the relevance of this material to our own views of the world and how we should lead our lives.

**CULTBLF 27 Among the Nations: Jewish History in Pagan, Christian and Muslim Context**

Course ID: 123621

Faculty: Jay Harris

Next Term Offered: 2017 Spring

Can we trace an "authentic" Jewish identity through history, as distinct from many "cultures" of Jews in the multitude of times and places in which they have lived? This course provides an overview of major trends in Jewish civilization from biblical times through the early modern era (to approximately the 17th century), with this and related questions in mind, by engaging in close readings of traditional Jewish sources on the one hand and seeking contextual understandings of Jews and Judaism within various non-Jewish settings on the other.

**CULTBLF 31 Saints, Heretics, and Atheists: An Historical Introduction to the Philosophy of Religion**

Course ID: 122258

Faculty: Jeffrey McDonough

Next Term Offered: 2017 Spring

This course offers an introduction to perennial themes in the philosophy of Western religion while situating those themes in a broad historical context. Students read central works by Plato, Augustine, Anselm, Ibn Sina, al-Ghazali, Aquinas, Pascal, Spinoza, Hume and Nietzsche. Topics include piety, evil, free will, sin, devils, angels, the soul, immortality, mysticism, faith, reason, and God's nature and existence.

**CULTBLF 32 Back Roads to Far Places: Literature of Journey and Quest**

Course ID: 126145

Faculty: William A. Graham

Next Term Offered: 2016 Fall

Explores themes of journey and quest in world literature and the interplay between their literary and religious dimensions. Considers the relationship between physical and interior journeys, home and exile, quest and peregrination. Emphasis will be on careful reading of, and thoughtful essays on, texts such as Gilgamesh, the Bible, Quest of the Holy Grail, Walden, and works by Tolkien, Dante, Teresa of Avila, Ashvaghosha, Hesse, Basho, Shusako Endo, Charles Johnson, Virginia Woolfe, and Cormac McCarthy.

**CULTBLF 34 Madness and Medicine: Themes in the History of Psychiatry**

Course ID: 123736

Faculty: Anne Harrington

Next Term Offered: 2016 Fall

Psychiatry is one of the most intellectually and socially complex and fraught fields of medicine today, and history offers one powerful strategy for better understanding why. Topics covered in this course include the invention of the mental asylum, early efforts to understand mental disorders as disorders of the brain or biochemistry, the rise of psychoanalysis, psychiatry and war, the rise of psychopharmacology, the making of the DSM, anti-psychiatry, and more.

**CULTBLF 41 Gender, Islam, and Nation in the Middle East and North Africa**

Course ID: 118217

Faculty: Afsaneh Najmabadi

Next Term Offered: 2017 Spring

This course will focus on how concepts of woman and gender have defined meanings of religious and national communities in the Islamic Middle East and North Africa. It will survey changes in these concepts historically through reading a variety of sources—religious texts and commentaries, literary and political writings, books of advice, women's writings, and films—and will look at how contemporary thinkers and activists ground themselves differently in this historical heritage to constitute contesting positions regarding gender and national politics today.

**CULTBLF 42 Communism and the Politics of Culture: Czechoslovakia from World War II to**

## **the Velvet Revolution**

Course ID: 123734

Faculty: Jonathan Bolton

Next Term Offered: 2017 Spring

What was Communism, and how did it shape the intellectual life of East Central Europe after World War II? How do artists and writers counter the ideological pressures of the state? This course examines how the intense political pressures of invasion, occupation, and revolution shape a country's cultural life and are shaped by it in turn. We look at Czechoslovakia's literature, drama, film, and music from the 1948 Communist takeover, through the Prague Spring and Soviet invasion of 1968, to the 1989 Velvet Revolution, a hallmark of the peaceful overthrow of Communism in Europe. We consider works by Milan Kundera, Bohumil Hrabal, Vaclav Havel; films of the Czech New Wave (Milos Forman, Vera Chytilova, Jiri Menzel); clandestine publishing and underground art; and theories of political dissent under authoritarian regimes.

## **CULTBLF 45 The History of the English Language**

Course ID: 126847

Faculty: Daniel Donoghue

Next Term Offered: 2016 Fall

Everyone who uses English has experienced its idiosyncrasies. Why is pronunciation at odds with spelling? Why so many irregular verbs? What happened to "thou"? What did Shakespeare sound like? How do we know? What about the current stature of English as a world language? This course addresses such questions as it surveys the long history of the language. While the topic is fascinating on its own, a historical knowledge of English gives critical and creative writers more command over the medium of their craft; it also sharpens reading skills. Lectures will be supplemented by exercises from the course website.

## **CULTBLF 46 Music, Debate, and Islam**

Course ID: 127185

Faculty: Richard Wolf

Next Term Offered: 2017 Spring

This course focuses on the arts of sound practiced by Muslims and on debates associated with "music" in a range of Islamic contexts. The purposes are to understand from a musically informed perspective a set of interrelated musical practices that cut across regions (especially South and West Asia); and how different ideologies, philosophies, and texts associated with Islam locally, nationally, and internationally shape local understandings and constructions of sound. The content of classes will include lectures, discussions, live musical demonstrations and careful review of audio-visual materials. Students will also have the opportunity to learn to play or sing Persian music.

## **CULTBLF 49 American Protest Literature from Tom Paine to Tupac**

Course ID: 119747

Faculty: John Stauffer

Next Term Offered: 2016 Fall

This interdisciplinary course examines the rich tradition of progressive protest literature in the US from the American Revolution to the rise of Hip Hop, globalization, and modern-day slavery. Using a broad definition of "protest literature," it focuses on the production and consumption of dissent as a site of progressive social critique, using a wide variety of print, visual, and oral forms. We examine the historical links between modes of protest and meanings of literature, and explore how various expressions of dissent function as aesthetic, performative, rhetorical, and ideological texts within specific cultural contexts. "Readings" range from novels to photographs and music.

**CULTBLF 52 The American Evangelical Tradition from Jonathan Edwards to Jerry Falwell**

Course ID: 123961

Faculty: David Hempton

Next Term Offered: 2016 Fall

The purpose of the course is to investigate the evangelical tradition from its origins in the religious revivals of the eighteenth century to its contemporary role in American culture, society and politics. Notwithstanding its often stereotypical characterizations, the evangelical tradition is surprisingly eclectic and complex. A central objective of the course, therefore, is to explore that complexity in relation to gender, ethnicity, social class, and political culture. The course will make use of primary and secondary materials to shed light on evangelical theology, spirituality, and cultural expression in America and in a global context.

**CULTBLF 53 Sacred and Secular Poetry**

Course ID: 108402

Faculty: Judith Ryan

Next Term Offered: 2016 Fall

Tracing poetry from its origins in religious practice, the course examines the process of secularization and the ways in which modern poems retain traces of sacred texts. As poets grapple with an increasingly secular world, the emergence of modernity is revealed in vivid ways. Class discussions will explore the extent to which reminiscences of the sacred form part of the deeper appeal of poetry and its ability to shape meaning in the modern world.

**CULTBLF 55 The Enlightenment**

Course ID: 108852

Faculty: James Engell

Next Term Offered: 2017 Spring

The Enlightenment creates modern ideas of the self, a just society, and reformed institutions. The course explores six interrelated developments: (1) taking nothing on authority, a spirit of critique examines knowledge, religion, and government; (2) the spread of general knowledge to populations of increasing literacy; (3) debates about human nature\_naturally selfish or sympathetic, altered by race or gender, innate or learned? (4) new institutions for equity and justice, even using violent revolution; (5) efforts supporting abolition, women's rights, and religious toleration; (6) self-consciousness in philosophy, art, and psychology. Thinkers include Pope, Montesquieu, Voltaire, Diderot, Johnson, Rousseau, Burke, Lessing, Gibbon, Smith, Kant, Burney, and Wollstonecraft.

**CULTBLF 56 The Culture of Capitalism**

Course ID: 108476

Faculty: Martin Puchner

Next Term Offered: 2017 Spring

The course asks how cultural products, including literature, theater and film have captured the spirit of capitalism-fuelling its fantasies, contemplating its effects, and chronicling its crises. More than just an economic system, capitalism created new habits of life and mind as well as new values, forged and distilled by new forms of art. Core readings by Defoe, Franklin, O'Neill, Rand, Miller, and Mamet and background readings by Smith, Marx, Taylor, Weber, Keynes, and Hayek.

**CULTBLF 59 Athens, Rome, and Us: Questions of Identity**

Course ID: 109678

Faculty: Emma Dench

Next Term Offered: 2016 Fall

A thematic and comparative exploration of questions of identity in Athens of the fifth to fourth centuries BCE and Rome of the 1st cent. BCE to 1st cent. CE, emphasizing connections with our own society and world-view. How did the ancient Athenians and Romans, and sub-groups of ancient Athenians and Romans, imagine connections and differences between themselves and others peoples? How far did the societies of classical identity have concepts of race, ethnicity, citizenship, nations or gender identities and sexualities that correspond at all closely to our own? Why do these issues matter to us, and what can we learn from these ancient societies?

**CULTBLF 60 Religion in India: Texts and Traditions in a Complex Society**

Course ID: 156302

Faculty: Diana Eck

Next Term Offered: 2016 Fall

An exploration of the classical texts, spiritual teachings, epic narratives, and religious movements that have shaped a complex civilization for some three thousand years, from the Indus Valley to today. Readings in primary sources - Vedas and Upanishads, Buddhist and Jain teachings, the Mahabharata and the Bhagavad Gita, Bhakti and Sufi poets, Sikh gurus and Muslim kings. Attention to the creation of a rich and composite civilization and the ways in which these sources continue to be of significance to the understanding of modern India.

**CULTBLF 61 Gender and Science**

Course ID: 156924

Faculty: Sarah Richardson

Next Term Offered: 2017 Spring

Why are women well represented in some fields of scientific study but not others? Do gender beliefs influence the content of scientific knowledge? How is gender encoded in the practices and norms of science? This course explores the intersection of gender and science from Bacon's

seventeenth century call to raise a "masculine" science to the present. Topics include: girls, boys, and science education; gender and technology; women in the science professions; bias and objectivity in science; and gender and science in literature, film, and popular culture.

### **EMREAS 14 Fat Chance**

Course ID: 125830

Faculty: Joseph D. Harris

Next Term Offered: 2016 Fall

This course has three objectives: to learn to calculate probabilities precisely, when we can; to learn how to estimate them, when we can't; and to say exactly what we can and can't infer from these calculations. The course is not mathematically demanding--we assume no mathematical background beyond high-school algebra--but the goal is serious: given that we're asked every day to make consequential decisions on the basis of incomplete knowledge, an understanding of basic probability is an essential tool for life.

### **EMREAS 19 The Art of Numbers**

Course ID: 117537

Faculty: Alyssa Goodman

Next Term Offered: 2016 Fall

As data sets get larger and larger, visual tools for exploring them become even more important. "The Art of Numbers" focuses on the insight into quantitative information offered by graphs, tables, charts, maps, and other illustrations. The course explores which graphical tool(s) are best for communicating what kinds of data, and why? Ideas about causality, approximation, statistical significance, credibility, and dimensionality are addressed by analyzing real data and their display. Examples are drawn from epidemiology, astronomy, sports, social-science, finance, geography, politics and economics. Approximately one-half of the course material focuses on web, interactive, and live presentations of data. Textbooks include classic work by Edward Tufte.

### **ETHRSON 11 Human Rights: A Philosophical Introduction**

Course ID: 125192

Faculty: Mathias Risse

Next Term Offered: 2017 Spring

What are human rights? Why would individuals have such rights? How can rights be universal, and what rights are universal? How can human rights rhetoric be criticized? This course will approach these and related questions philosophically, but with an eye to international politics.

### **ETHRSON 13 Self, Freedom, and Existence**

Course ID: 118771

Faculty: Richard Moran

Next Term Offered: 2016 Fall

How is human freedom possible? Does acting freely mean acting in accordance with reasons or acting arbitrarily, or neither? Are values chosen, discovered, or invented? How is self-knowledge possible and how is it different from the knowledge of others? Specific issues to be discussed include: self-deception and bad faith; the nature of freedom and autonomy; subjectivity and our relation to others; rationality and irrationality. Readings, which will provide an introduction to a few of the major texts of Existentialism, will be drawn from Kant, Sartre, Dostoevsky, and various contemporary writers.

### **ETHRSON 18 Classical Chinese Ethical and Political Theory**

Course ID: 121778

Faculty: Michael J. Puett

Next Term Offered: 2016 Fall

What is the best way to live a fuller and more ethical life? Concretely what should we do to begin to live in a more flourishing and inspiring way? Questions such as these were at the heart of philosophical debates in China. The answers that classical Chinese thinkers developed in response to these questions are among the most powerful in human history. Regardless of whether one agrees with them or not, they should be studied and taken seriously by anyone who cares about ethics, politics, and the ways to live life more fully.

### **ETHRSON 20 Self, Serenity, and Vulnerability: West and East**

Course ID: 122544

Faculty: Michael J. Puett

Next Term Offered: 2017 Spring

An inquiry into basic moral beliefs and their metaphysical assumptions in the high cultures of Western and Eastern civilizations. The background concern is our struggle, in philosophy, religion, and art, with nihilism: the fear that our lives and the world itself may be meaningless. The foreground theme is the contrast between two answers to the question about how to live one's life: stay out of trouble and look for trouble. How speculative thought has dealt with the limits of insight into what matters most. Exemplary writings from several traditions: modern European, ancient Greek, Chinese, South Asian.

### **ETHRSON 21 Protest, Politics, and Perception**

Course ID: 114783

Faculty: Susanna C. Siegel

Next Term Offered: 2017 Spring

An examination of moral questions that arise in the context of social protest in the US during the 20th century, including the central question of political philosophy: How can political authority be justified? After studying the Attica prison revolt of 1971, we will consider the following questions: Is there an obligation to obey the law? What, if any, are the moral limits to this obligation? Can civil disobedience be justified, and does it always need to be? Texts include classic excerpts from Plato, Hobbes, Rawls, and Marx.

### **ETHRSON 30 The Just World**

Course ID: 127997

Faculty: Mathias Risse

Next Term Offered: 2016 Fall

Globalization is changing the world. What do wealthy countries have to do to contribute towards the creation of a just world? We start by exploring different approaches to the question of whether obligations of justice apply only to those who share a country. We will then assess whether the global order harms the poor. Next we look at human rights and ask whether liberal values should be promoted as universal human rights. We will complete the course by exploring three additional subjects: moral obligations arising from trade (specifically whether labor standards should be linked with human rights standards), immigration, and environmental justice.

### **ETHRSON 31 The Philosopher and the Tyrant**

Course ID: 107880

Faculty: David Damrosch

Next Term Offered: 2016 Fall

Philosophers and politicians alike struggle to set the terms for living a good life in a world of conflict. How do court counselors and professional philosophers speak truth to power? How do rulers - and citizens like ourselves - weigh the competing demands of liberty and order, self-fulfillment and self-restraint? Moving from Plato and the *Bible* to responses to Hitler's *Mein Kampf*, this course will examine particularly rich examples of relations between the pursuit of wisdom and the pursuit of power, from the extremes of conflict (the executions of Socrates, Jesus, Sir Thomas More) to the opposite dream of the philosopher king.

### **ETHRSON 32 Security: Carefree or Careless**

Course ID: 108398

Faculty: John T. Hamilton

Next Term Offered: 2016 Fall

The term "security" has enjoyed a complex and ambivalent career. Broadly defined as a "removal of care," security leaves its subjects either carefree or careless. Pursuing an itinerary from the Stoics to psychoanalysis, from international relations to feminist theory, the course draws out the ethical implications of the persistent concern to be free of concern. Does "security" make us vigilant or negligent, confident or complacent? Does it promote more fear than it assuages? Is a security purchased with freedom or human rights morally viable? Such questions broach a more informed, nuanced, and critical engagement concerning our civic, professional and personal lives.

### **ETHRSON 33 Medical Ethics and History**

Course ID: 108405

Faculty: David Shumway Jones

Next Term Offered: 2016 Fall

Disease and medicine have generated ethical dilemmas that have challenged patients and doctors for centuries, from abortion and euthanasia to informed consent and compulsory treatment. Although moral philosophy can clarify the relevant issues, resolution often depends on the details of the specific clinical and social contexts. Taking a historical approach to medical ethics, this class explores how the moral discourse in health care has changed over time in order to understand how social factors influence the persuasiveness of moral arguments. The focus will be on medical practice in the United States in the twentieth century.

### **ETHRSON 34 Liberty**

Course ID: 108853

Faculty: James Hankins

Next Term Offered: 2017 Spring

What is liberty? What considerations justify taking away an individual's freedom? All modern political philosophies and all forms of government claim to be liberating individuals or groups from oppression, but can these claims withstand critical scrutiny? Is power in the hands of the state the best way to secure the freedom and happiness of individuals? Beginning with an intellectual history of ideas of freedom in the Western tradition, the course proceeds to examine a series of issues and debates that invoke the value of freedom in the modern world: taxation, private property, public speech, and government attempts to shape and regulate the individual's behavior and morality.

### **ETHRSON 35 Nature**

Course ID: 109030

Faculty: Joyce Chaplin

Next Term Offered: 2017 Spring

Ethical relations among people have always implied (whether directly or covertly) a preferred connection between people and nature. This course offers a critical and historical analysis of selected texts that identify human beings as a distinctively ethical species within the natural world, with particular attention to the emergence of normative theories that rank people with and against other natural beings. Topics include: definitions of wilderness and property; social hierarchies based on "natural" differences; agriculture, modern science, industrialization, and consumer economies as historic redefinitions of the human place within nature; animal rights; and environmentalism and its critics.

### **ETHRSON 36 Institutional Corruption**

Course ID: 110297

Faculty: Lawrence Lessig

Next Term Offered: 2017 Spring

Institutions make modern life possible by organizing human interactions on a massive scale. We generally benefit from the incentives, norms, and information that institutions provide. However, if corrupted, institutions can cause grave harm. This course will introduce students to "institutional corruption" and equip them with the intellectual tools needed to diagnose, understand, and address its problems. The first half of the semester will draw on economic theory, political philosophy,

psychology, and sociology to understand institutional corruption. The second half will examine cases of institutional corruption in medicine, finance, politics, courts, journalism, and academic research and further explore strategies for reform.

### **ETHRSON 37 Adam & Eve**

Course ID: 109904

Faculty: Joseph Koerner

Next Term Offered: 2017 Spring

What is the power of a story? For several thousand years Adam and Eve were the protagonists in the central origin myth of the Jewish, Christian, and Muslim worlds. That myth was the arena for ethical reasoning about transgression and innocence, sexuality, gender roles, labor, suffering, and death. Jointly taught by History of Art and Architecture and English, our course focuses on this enigmatic story and its spectacular elaborations in theology, philosophy, literature and art. Above all, looking closely at some of the greatest achievements of European art and literature\_ from Dürer, Michelangelo and Rembrandt to Milton's Paradise Lost\_ we will compare the possibilities of the verbal and visual arts in portraying human being.

### **SCILIVSY 11 Molecules of Life**

Course ID: 125193

Faculty: Jon Clardy

Next Term Offered: 2016 Fall

Molecules form the basis of heredity, govern how our bodies develop, allow us to respond to changes in our environment, and carry our thoughts. This course explores the roles of molecules through case studies of our bodies' messengers, modern drugs, and the future of medicine. Examples include sexual development, metabolism, diabetes, nerve transmission, psychiatric disease, infectious disease, cancer, aging and stem cells. Students will connect to lecture material in discussion section through hands-on activities and role-playing scenarios.

### **SCILIVSY 12 Understanding Darwinism**

Course ID: 125195

Faculty: Janet Browne

Next Term Offered: 2016 Fall

An interdisciplinary exploration of Darwin's ideas and their impact on science and society. The course links the history of Darwin's ideas with the key features of modern evolutionary biology. We review the development of the main elements of the theory of evolution, highlighting the areas in which Darwin's ideas have proved remarkably robust and areas in which subsequent developments have significantly modified the theory. By also analyzing the historical context of the development of evolutionary thought beyond Darwin, the course emphasizes the dynamic interplay between science and society.

### **SCILIVSY 25 Trees, Forests and Global Change**

Course ID: 111818  
Faculty: Donald Pfister  
Next Term Offered: 2017 Spring

Forests cover nearly one third of the earth's land surface area. They provide a vast range of products and services to human civilization, and are important for economic and cultural reasons. This class will provide students with an introduction to the biology and ecology of forest ecosystems. An overarching theme throughout the course will be to understand how climate change will affect forests and the ecological services we derive from them, and in turn how forests can affect their own growth environment and climate change itself.

### **SCIPHUNV 17 The Einstein Revolution**

Course ID: 113225  
Faculty: Peter Galison  
Next Term Offered: 2017 Spring

Albert Einstein has become the icon of modern science. Following his scientific, cultural, philosophical, and political trajectory, this course aims to track the changing role of physics in the 20th- and 21st- centuries. Addresses Einstein's engagement with relativity, quantum mechanics, Nazism, nuclear weapons, philosophy, and technology, and raises basic questions about what it means to understand physics and its history. This is a hybrid course that will combine online lessons with an active, participatory class structure.

### **SCIPHUNV 19 The Energetic Universe**

Course ID: 117334  
Faculty: Robert Kirshner  
Next Term Offered: 2017 Spring

The nature and history of matter revealed by astronomical observation and experimental physics. Explores the Big Bang and the accelerating universe, stellar evolution and supernova explosions, evidence for invisible matter and dark energy, and the development of structure in the universe. Demonstrates the physical principles used to interpret astronomical data and to construct a history of the evolution of the universe on the microscopic and cosmic scales. Examines the way microscopic properties of matter determine properties of people, stars, galaxies, and the universe as a whole.

### **SCIPHUNV 26 Primitive Navigation**

Course ID: 126603  
Faculty: John Huth  
Next Term Offered: 2017 Spring

We use the theme of primitive navigation to open the eyes of students to the physical world in a direct and palpable manner. Basic principles include human cognition of physical and mental maps, dead reckoning, direction finding from nature. The course includes the basics of astronomy, including planetary orbits, meteorology, thermodynamics, bird behavior, electromagnetic radiation, optics, waves, tides, ocean currents, and fluid dynamics. Navigational practices of Pacific Islanders,

Norse, medieval Arabs, and early western Europeans provide a focus. Some facility with algebra and trigonometry is useful. A series of hands-on projects are employed to understand navigational practices discussed in lecture.

### **SCIPHUNV 28 Invisible Worlds**

Course ID: 119755

Faculty: Mara Prentiss

Next Term Offered: 2016 Fall

What we perceive as "reality" is the best effort of our senses to interpret a deeper, largely invisible, reality that is unnervingly strange. This course will survey the world of very small things, objects with dimensions of nanometers and micrometers. The behaviors of these objects are often entirely counterintuitive; they can also be quite useful. Micro- and nanostructures are the basis both of fundamentally new science, and of ubiquitous technologies: quantum dots, computers, the biological nanomotors that power muscle, buckyballs, tools for examining single mammalian cells, lasers. The course will describe these objects and how they function; it will also touch on issues of commercialization, economics, public policy, and ethics that spring from the avalanche of discovery and invention in this area.

### **SOCWORLD 15 The Cuban Revolution, 1956-1971: A Self-Debate**

Course ID: 120132

Faculty: Jorge Dominguez

Next Term Offered: 2016 Fall

Focus on the insurrectionary war, the consolidation of power, Fidel Castro's role, the role of organized labor and the peasantry, the US-Cuban conflict, the alliance with the Soviet Union, the choice of economic strategy, the "remaking of human beings," the role of intellectuals, and the support for revolutions in Africa and Latin America. The instructor debates himself, presenting two or more views on each topic. Readings include original documents in translation.

### **SOCWORLD 18 Europe on Trial: Retribution, Renewal and Reconciliation Since 1945**

Course ID: 119087

Faculty: Mary Lewis

Next Term Offered: 2017 Spring

This course examines Europe from the aftermath of the world's most destructive war to today's euro crisis. Using the idea of "trials" both literally and figuratively, we will address the major themes of postwar retribution, the Cold War, decolonization, new social movements, the fall of Communism, the expanding European Union, and the dilemmas facing a pluralist and postcolonial Europe. The roles of vigilante justice, terrorism, social justice and economic welfare will also be explored. Students will study the transcripts and accounts of political trials to examine how these themes occurred and recurred in post-war Europe.

### **SOCWORLD 19 Western Ascendancy: The Mainsprings of Global Power from 1400 to the**

## **Present**

Course ID: 126191

Faculty: Niall Ferguson

Next Term Offered: 2016 Fall

From the scientific revolution to the industrial revolution, from representative government to the consumer society, from capitalism to nationalism and socialism, the ideas and institutions of "the West" (meaning Europe and its colonies of settlement) came to dominate the world in the five centuries after around 1500. But what were the mainsprings of Western power? Taking a comparative historical approach, this course seeks to identify the key economic, cultural, social, political and military differences between the West and "the Rest."

## **SOCWORLD 22 Asia in the Making of the Modern World**

Course ID: 126192

Faculty: Shigehisa Kuriyama

Next Term Offered: 2017 Spring

How did we come to live as we do? Why do we eat what we eat, wear what we wear, play the games that we play, take the SATs? The roots of a surprisingly large number of things that we now take for granted, as parts of everyday American life, lie deep in the Asian past. In this class you will learn to perceive global history in the American present, and more importantly, to make new historical discoveries yourself. You will master powerful new tools of research and presentation that will allow you to uncover the hidden ties binding our lives here and now with Asia centuries or even millennia ago, and to broadcast your original findings. No prior knowledge of Asian history or languages required. Limited enrollment.

## **SOCWORLD 26 Africa and Africans: The Making of a Continent in the Modern World**

Course ID: 116991

Faculty: Caroline Elkins

Next Term Offered: 2017 Spring

Understanding Africa as it exists today requires an understanding of the broader historical trends that have dominated the continent's past. This course will provide an historical context for understanding issues and problems as they exist in contemporary Africa. It will offer an integrated interpretation of sub-Saharan African history from the middle of the 19th century and the dawn of formal colonial rule through the period of independence until the present time. Particular emphasis will be given to the continent's major historical themes during this period. Selected case studies will be offered from throughout the continent to provide illustrative examples of the historical trends.

## **SOCWORLD 28 Exploration and Empire Building**

Course ID: 127962

Faculty: Kelly A. O'Neill

Next Term Offered: 2017 Spring

This course studies the relationships between scientific study, aesthetic representation, and imperial power. Students will examine documentary and visual records of encounters between

indigenous peoples, agents of rival empires, and the physical environment along the vast Siberian and Pacific frontiers.

**SOCWORLD 35 Conditional Equality: The Case of the Jews of Europe in Modern Times**

Course ID: 126640

Faculty: Jay Harris

Next Term Offered: 2016 Fall

This course is a study in the relations between majorities and minorities in modern Europe, using the Jews as a focus. It will examine the ways in which the equal status of a minority is negotiated through cultural and political interaction, both subtle and blunt. It will further focus on the role that such negotiations have in the formation of identities of both the majority and the minority. Finally, it will examine the ways in which majorities can exercise control over minorities rendering them conditionally rather than fully equal participants in the national projects of the age.

**SOCWORLD 36 Modern India and South Asia**

Course ID: 116237

Faculty: Sugata Bose

Next Term Offered: 2016 Fall

This course provides the historical depth and the comparative context in which to understand contemporary South Asia through an historical inquiry into the making and multiple meanings of modernity. It explores the history, culture, and political economy of the subcontinent which provides a fascinating laboratory to study such themes as colonialism, nationalism, partition, the modern state, economic development, refashioning of religious identities, center-region problems and relations between Asia and the West. Significant use of primary written sources (in English) and multi-media presentations.

**SOCWORLD 37 The Chinese Overseas**

Course ID: 125053

Faculty: Michael Szonyi

Next Term Offered: 2016 Fall

This course introduces the emigration of people from China to other parts of the world over the last five centuries. It considers the causes of emigration, the ties that emigrants retained to China, and the communities that Overseas Chinese created abroad. It compares the experiences of emigrants and their descendants in Southeast Asia and in North America. Last, it tries to situate the recent wave of Chinese migration to North America in global and historical context.

**SOCWORLD 43 Japan's Samurai Revolution**

Course ID: 114776

Faculty: Ian J. Miller

Next Term Offered: 2016 Fall

On July 8, 1853, Commodore Mathew C. Perry steamed into Japan's Edo Bay with four heavily armed US Navy warships. Two were the so-called "black ships," ominously painted coal-burning steamships of the latest design. There, within view of a stunned populace, Perry issued an ultimatum: open the country to trade or face unstoppable bombardment. Thus began Japan's modern engagement with the outside world, a new chapter in the broader encounter between "East" and "West." Through primary sources, discussion and lecture, this course examines Japan's rapid development from samurai-led feudalism into the world's first non-Western imperial power.

### **SOCWORLD 50 Political Corruption**

Course ID: 109789

Faculty: James Alt

Next Term Offered: 2016 Fall

Political corruption exists everywhere, but which countries are most corrupt? Do highly corrupt countries share common characteristics? How much corruption is there? The social costs of political corruption, from the stealing of public funds to bribes paid to avoid basic safety and health regulations, are often extremely high. Why are so few recent attempts to fight corruption successful? The course is comparative, draws historical connections, and as far as possible requires no background knowledge.

### **SOCWORLD 51 Politics of Nature**

Course ID: 122012

Faculty: Ajantha Subramanian

Next Term Offered: 2016 Fall

This course examines the historical, social, and political life of nature in its many manifestations--as a source of life and livelihood, as a resource for exploitation, as a heritage to be protected, and as a post-industrial hybrid--in order to understand the variety of human interactions with the natural environment. Through a focus on property relations, imperialism, development, and science, students will be exposed to the intimate connection between social inequality and ecological degradation, and encouraged to envision possibilities for a future of greater equality and sustainability.

### **SOCWORLD 52 The Phoenix and the Firebird: Russia in Global Perspective**

Course ID: 109891

Faculty: Julie A. Buckler

Next Term Offered: 2017 Spring

From the Middle East to the Pacific rim, Russia is re-emerging as a major player on the world stage. Russia has transitioned in significant ways since the 1991 break-up of the Soviet Union ("the evil empire"), just as it did during the tumultuous aftermath of the 1917 Bolshevik Revolution that ended a 300-year imperial dynasty. Through in-depth, interdisciplinary examination of six key themes with contemporary as well as historical resonance (conquest, political terror, the environment, commerce, imaginative representations, and mobility), we will investigate the evolving

concept of "Russianness" in a global context. Assignments include curation of a "Russia in the World" digital exhibit.

### **SOCWORLD 53 The Fall of the Roman Empire**

Course ID: 121636

Faculty: Michael McCormick

Next Term Offered: 2017 Spring

Uses the latest results of archaeology, written sources, environmental sciences, genetics, GIS, etc., to study the changes, violent or subtle, that transformed the Roman world to produce medieval civilization between ca. 300 and 700. Topics include Constantine's conversion; economic recovery, collapse and climate change; the barbarians; women and power; pandemic disease; emphasizes reading of ancient sources in translation, archaeology, and the sciences of the human past.

### **US-WORLD 12 American Encounters: Art, Contact, and Conflict, 1560-1860**

Course ID: 124630

Faculty: Jennifer L. Roberts

Next Term Offered: 2017 Spring

An introduction to early American art from a transnational, cross-cultural perspective. We begin with the global struggle for control of the North American continent, tracing the colliding artistic traditions of multiple European colonial powers, Native American groups, and slave cultures. We then examine the cultural constitution of U.S. nationhood as it developed through (and against) the visual and material cultures of Europe and the Atlantic and Pacific worlds. Icons of a seemingly familiar national heritage—such as Washington's portrait on the dollar bill—are revealed as complex formal negotiations emerging from international dynamics of commerce, politics, religion, science, and migration.

### **US-WORLD 13 Medicine and Society in America**

Course ID: 110829

Faculty: David Shumway Jones

Next Term Offered: 2016 Fall

Surveys major developments in the history of American medicine since 1500. Emphasis on setting the practice of medicine and the experience of health and disease into broad social, cultural, and political contexts. Topics include the social and cultural impact of epidemic disease; the nature of demographic and epidemiological change; the development of medical therapeutics and technologies; the growth of health care institutions; the rise of the medical profession; and debates about the allocation of health care resources. Evaluates the role of medicine in addressing social needs as well as the social and economic determinants of patterns of health and disease.

### **US-WORLD 15 Is the American Racial Order Being Transformed?**

Course ID: 116248

Faculty: Jennifer Hochschild

Next Term Offered: 2016 Fall

Is a fundamental transformation occurring in the American racial order? If so, are these changes for the better or the worse? We first briefly explore the history of American racial and ethnic dynamics, then examine four potentially transformative forces: high levels of immigration, rising multiracialism, links between genomic science and "race," and the changing behaviors and beliefs of young American adults. We then consider blockages to transformation: incarceration of nonAnglo men, wealth disparities, and treatment of Muslims and undocumented immigrants. We conclude by imagining various ideal futures for race and ethnicity in the U.S.

### **US-WORLD 20 The Theory and Practice of Republican Government**

Course ID: 120049

Faculty: Daniel Carpenter

Next Term Offered: 2017 Spring

A theoretical and historical survey of the evolution of republican (representative) government, with a particular focus upon European and American institutions. We will alternate between philosophical treatments and empirical studies of republican regimes. Questions include: How did republican government evolve (in England and France) centuries before mass elections? What institutions besides elections keep the ruled attuned to the people? Did arguments for legislative supremacy prefigure the rise of parliamentary authority? If so, how? How did modern republics co-evolve with institutions of slavery? What is the role of virtue in a democratic republic? How can government ensure the "rule of the wise" without fostering autocratic power? What critique might republican theory advance of populist and libertarian arrangements, and how populist and libertarian critics respond?

### **US-WORLD 26 Sex and the Citizen: Race, Gender, and Belonging in the United States**

Course ID: 126319

Faculty: Caroline Light

Next Term Offered: 2017 Spring

Even before the formal establishment of the United States, assumptions about sex have helped determine who is entitled to - and not entitled to - the privileges and protections of full citizenship. This course investigates the roles that sex, race, gender, and sexuality have played in configuring notions of citizenship over time as well as the ways in which sexual rights remain a site of contestation and struggle in the modern United States.

### **US-WORLD 28 Slavery/Capitalism/Imperialism: The US in the Nineteenth Century**

Course ID: 123124

Faculty: Walter Johnson

Next Term Offered: 2017 Spring

This course treats the history of the 19th-century US and the Civil War in light of the history of US imperialism, especially the War of 1812, the Mexican-American War, and the illegal invasions of Cuba and Nicaragua in the 1850s. Likewise, it relates the history of slavery in the US to the Haitian Revolution, the Louisiana Purchase, Indian removal, Atlantic cotton, land and money markets, and

the hemispheric history of antislavery.

**US-WORLD 30 Tangible Things: Harvard Collections in World History**

Course ID: 126639

Faculty: Laurel Ulrich

Next Term Offered: 2017 Spring

People make history through the things they make, collect, exhibit, exchange, throw away, or ignore. Over four centuries, Harvard has not only amassed books and manuscripts but art works, scientific instruments and specimens, ethnographic objects, and historical relics of all sorts. By learning how and why particular things arrived in Cambridge and what happened to them when they got here, students will discover how material objects have shaped academic disciplines, reinforced or challenged social boundaries, and defined America's place in the world. This is an interactive course, with weekly visits to museums and close-up investigation of specimens and artifacts.

**US-WORLD 31 American Society and Public Policy**

Course ID: 119025

Faculty: Theda Skocpol

Next Term Offered: 2016 Fall

In the U.S., compared to other major nations, how have social problems been defined and redefined in recent decades; why do they appear differently to various groups; and how are public policies about problematic social conditions debated, devised, and changed? This course synthesizes various kinds of evidence—demographic, attitudinal, ethnographic, and institutional—to probe the creation and impact of major public policies about social support for families and workers; immigration and citizenship; and access to higher education.

**US-WORLD 32 The World's Religions in Multicultural America: Case Studies in Religious Pluralism**

Course ID: 118775

Faculty: Diana Eck

Next Term Offered: 2017 Spring

An exploration of the dynamic religious landscape of the US with special focus on Muslim, Hindu, Buddhist, and Sikh traditions in the most recent period of post-1965 immigration. How are faith and freedom negotiated in a more complex society? In what contexts do minority religious communities encounter long-dominant Christian and Jewish communities? How is America changing as religious communities struggle with civic, constitutional, ethical, and theological issues, especially in the post-9/11 period? Readings, films, discussion, and class projects will focus on particular cases and controversies.

**US-WORLD 33 Religion and Social Change**

Course ID: 118717

Faculty: Marla Frederick  
Next Term Offered: 2016 Fall

Religion has inspired new understandings of social and political engagement. From early protest oriented struggles for civil rights in the US to the more recent personal responsibility calls of neo-pentecostal discourses, this course takes African American religious engagement with the process of democracy as a starting point for thinking about how other communities around the world have employed religion as a means of advancing social change. Through ethnography, auto/biography, and documentary film, this class compares and contrasts the influence that religious moods and motivations have had on calls for democracy and social change in places like Latin America, the Middle East and West Africa. In each instance the course questions the place of the US government and US religious bodies in these global efforts towards change.

## Germanic Languages and Literatures

### GERMAN 50 **German Drama and Theater**

Course ID: 126652

Faculty:

Next Term Offered: 2016 Fall

This course focuses on the full production of a German play. Introduction to performance theories and practices and intensive pronunciation practice. Students participate on stage and collaborate on different aspects of the production, including costumes, set, sound, and program. Two performances take place at the end of the term.

### GERMAN 67 **German in Revue: Kabarett through the 20th Century**

Course ID: 110103

Faculty:

Next Term Offered: 2017 Spring

Immersion into German language and culture through German *Kabarett* of the 20th century. Introduction to the writing and performance techniques of German cabaret artists, including the analysis of comedic skits, political and social satire, parody, and humorous poetry. The final project involves a performance of a *Kabarett* revue.

### GERMAN 102 **German Literature, Art, and Thought**

Course ID: 159710

Faculty: Nicole Suetterlin

Next Term Offered: 2017 Spring

This course explores the major trends and tensions that have informed German literature, art and thought from the 18th to the 21st centuries. In addition to developing the language skills to discuss, analyze and interpret literature, students will explore the rich cultural tradition in the German-speaking countries and its continued relevance for the world. Figures include: Kant, Goethe, Nietzsche, Freud, Benn, Kafka, Celan, Beethoven, and Wagner, plus a selection of writers from the post-War period.

### GERMAN 149 **Thomas Mann: Stories of Six Decades**

Course ID: 108518

Faculty: Peter Burgard

Next Term Offered: 2016 Fall

Addresses Mann's short stories and novellas (in translation) individually and as a body of work, as well as in their various literary, cultural, intellectual, and historical contexts. Texts: "Death in Venice," "Tonio Kröger," "Tristan," "Disillusionment," "Little Herr Friedemann," "Gladius Dei," "The Blood of the Walsungs," "Disorder and Early Sorrow," "Mario and the Magician," among others. Term papers may address stories discussed in class or one of Mann's novels (e.g. *Buddenbrooks*,

*The Magic Mountain, Doctor Faustus*).

**GERMAN 156 From Postwar to Postwall German Cinema**

Course ID: 108070

Faculty:

Next Term Offered: 2016 Fall

The New German Cinema would become internationally prominent during the 1970s. This class will focus on exemplars of the movement and also important films that preceded and followed it, features by Staudte, Fassbinder, Herzog, Kluge, Schlöndorff, von Trotta, Wenders, Dörrie, Tykwer, and Petzold. What meanings do these works (both as single entries and as functions of a collective national ensemble) have for us today? No previous course work in film studies is required or presumed.

**GERMAN 185 German Lyric Poetry: Tradition and Innovation**

Course ID: 109486

Faculty:

Next Term Offered: 2016 Fall

The course will explore the interplay between innovation and tradition in German poetry from 1770 to the present, focusing on such topics as originality and authenticity, difficulty and hermeticism, and poetic responses to crisis. Authors include Goethe, Hölderlin, Heine, Mörike, Droste, George, Rilke, Benn, and Celan.

**GERMAN 210 Excess: Baroque Art and Literature**

Course ID: 144773

Faculty:

Next Term Offered: 2018 Spring

European Baroque art and German Baroque literature. Revolutions of excess and devolutions of system in architecture, painting, sculpture, poetry, drama, narrative. Undergraduates welcome.

**GERMAN 251 Kafka in Context**

Course ID: 109515

Faculty:

Next Term Offered: 2016 Fall

Kafka's relation to his literary and cultural context, his characteristic narrative modes, humor and parody in his works, and the challenges his texts pose for readers.

## Health Policy

### **HLTHPOL 3002A Graduate Reading Course: Mental Health Policy**

Course ID: 113143

Faculty:

Next Term Offered: 2016 Fall

Participants discuss research on mental health policy and examine how to apply existing work and methodological approaches to their own work. Part one of a two-part series.

### **HLTHPOL 3002B Graduate Reading Course: Mental Health Policy**

Course ID: 159617

Faculty:

Next Term Offered: 2017 Spring

Participants discuss research on mental health policy and examine how to apply existing work and methodological approaches to their own work. Part two of a two-part series.

### **HLTHPOL 3020 Graduate Reading Course: Political Analysis**

Course ID: 112732

Faculty:

Next Term Offered: 2017 Spring

Graduate research course covering major topics in health politics and survey research. This course is designed to help students in the Political Analysis track of the Health Policy PhD program prepare for their concentration exam.

## History

### **HIST 70C Topics in Natural History**

Course ID: 124485

Faculty: Daniel Smail

Next Term Offered: 2017 Spring

A reading seminar focused on literature relevant for a natural history of humankind from several million years ago to the present. Topics will include population diasporas; long-distance exchange; coevolution; family, sex, and marriage; food; communication; goods and things; technology; human contact with ecosystems; status; demography and scale; and cognitive studies. The course will introduce students to the rapidly growing field of big history or deep history.

### **HIST 70J Byzantium between the Crusades and the Islamic World, c.1100-c.1450**

Course ID: 108058

Faculty: Dimiter Angelov

Next Term Offered: 2016 Fall

The seminar focuses on the eastern Mediterranean in a period of economic integration and political fragmentation marked by the crusades, the expansion of the Italian maritime republics, western colonization, and the conquests of the Turks. How did the Byzantines react to the new unsettled world around them? What was the role of the newcomers? Special attention will be paid to the crusades, cross-cultural contacts, and the Mediterranean economy.

### **HIST 74N U.S. History: Major Themes in the Twentieth Century**

Course ID: 125517

Faculty: Lisa McGirr

Next Term Offered: 2018 Spring

The twentieth-century United States is a vibrant and flourishing field of historical study. The goal of this seminar is to introduce students to the central questions, problems and debates in the history of the "American century." Students will learn how the literature of history has developed through reading both older and newer approaches. Readings focus on questions of politics, political culture, the state and social life. The course is both thematic and chronological (as well as necessarily selective). Students are expected to prepare well for seminar and to participate actively in discussion. Each class will begin with a brief introduction to the readings (no more than five minutes) by a member of the seminar. The idea here is for one student to take special responsibility for leading discussion, raising questions and problems posed by the reading.

### **HIST 80A Roman Imperialism**

Course ID: 122940

Faculty: Emma Dench

Next Term Offered: 2018 Spring

Whether regarded as a model for European empires or as a precursor of western colonialism and globalization, Roman imperial expansion has captured both popular and scholarly imaginations. We

proceed thematically, analyzing a variety of textual and material evidence for the changing nature of Roman imperialism between the mid-Republican and early imperial periods, and its impact on the politics, culture, religion, and society of Roman and local communities alike.

### **HIST 80G Travelers to Byzantium**

Course ID: 108055

Faculty: Dimiter Angelov

Next Term Offered: 2017 Fall

This seminar is based on the fascinating firsthand accounts of travelers who visited Constantinople and other areas of Byzantine world. The texts will generate questions for discussion and research on a wide range of issues, such as Byzantine civilization, cross-cultural contacts in the Middle Ages, the practice and experience of travel, and the interrelationship of travel, ethnography, and politics. Sources will be chosen from among the works of western, Islamic, Jewish, and Russian travelers.

### **HIST 82B Fin-de-Siècle Vienna**

Course ID: 120893

Faculty: Alison Frank Johnson

Next Term Offered: 2017 Fall

Explores the history of the political, social, and cultural center of the largest continental European Empire in modern history, and one of the birthplaces of European modernism. From the 1880s through WWI and into the early years of the Republic of Austria, the course examines not only Vienna's intellectual vitality, but also the social and ideological divisions underlying the human catastrophes of World War and genocide in the twentieth century.

### **HIST 82F The Origins of the Cold War: The Yalta Conference (1945)**

Course ID: 124495

Faculty: Serhii Plokhii

Next Term Offered: 2017 Spring

The Yalta Conference is analyzed in the context of the long-term geostrategic goals of the United States, the United Kingdom, and the USSR. Special attention is paid to psychological and cultural aspects of the negotiating process.

### **HIST 83A Markets and States: The History of Economic Thought Since 1750**

Course ID: 121621

Faculty: Emma Rothschild

Next Term Offered: 2016 Fall

Examines the history of various kinds of economic thought, including 18th century laissez-faire political economy and late 19th century theories of economic and social reform. Will consider writings in different media from scientific theories to economic periodicals. Students will prepare

individual research projects.

**HIST 83C Care of the Soul**

Course ID: 124487

Faculty: James Hankins

Next Term Offered: 2016 Fall

The teachings of major philosophers in the Western tradition about how living a philosophical life can cure diseases of the soul and bring tranquility, harmony with nature, and a sense of moral worth.

**HIST 84C Confronting Objects/Interpreting Culture: Interdisciplinary Perspectives on North America**

Course ID: 115630

Faculty: Laurel Ulrich

Next Term Offered: 2017 Spring

Working with museum collections as well as written documents, students will explore the interplay between particular objects and larger historical themes, such as colonialism, nationalism, scientific and ethnographic exploration, or expanding commerce. Employing a range of scholarly tools, emphasizing visual and material analysis and including archival research, students will help prepare materials for a future exhibit.

**HIST 84E How to Read a Book**

Course ID: 108494

Faculty: Jill Lepore

Next Term Offered: 2018 Spring

This hands-on interdisciplinary undergraduate seminar is for students who want to think about what a book is and how to read one. Readings include historical and literary narratives of reading by Cervantes, Richardson, Franklin, Sterne, Ellison, and Bradbury, together with research exercises in Harvard library and museum collections.

**HIST 84G Harvard and Slavery**

Course ID: 110365

Faculty: Sven Beckert

Next Term Offered: 2017 Spring

Will explore the links between Harvard and slavery during the first 229 years of the university's history. Students will write original research papers on various aspects of the history of Harvard University and slavery, including how resources extracted from slave labor benefited the university, the ways Harvard administrators and faculty supported or struggled against the institution of slavery, and what kinds of links the university built to slaveholders.

### **HIST 84L Democracy and Education in Modern America**

Course ID: 109407

Faculty: James Kloppenberg

Next Term Offered: 2017 Spring

The birth of contemporary American politics and our current regime of primary, secondary, and university education both date from the 1890-1930 period. Focusing on psychology, philosophy, and political and educational reform, with particular emphasis on the writings of William James and John Dewey, this course examines the shaping of modern American democracy and education.

### **HIST 84X The US and Europe in Twentieth-Century Thought and Culture**

Course ID: 107961

Faculty: Andrew Jewett

Next Term Offered: 2017 Spring

This seminar explores the intellectual and cultural dimensions of the complex relationship between Europe and the United States in the twentieth century. You will also contribute to telling the story of that relationship, by producing a long research paper based on original sources. Shared readings will provide a common fund of knowledge and a common language for discussion.

### **HIST 86H Asia after Europe**

Course ID: 107926

Faculty: Sugata Bose

Next Term Offered: 2017 Spring

The history of the decline and rise of a continent between 1813 and 2013 in the domains of economy, politics and culture.

### **HIST 88B Medieval History and Cinema**

Course ID: 126624

Faculty: Cemal Kafadar

Next Term Offered: 2017 Fall

This course deals with the challenges of representing medieval history by focusing on selected films, which will be viewed at two levels at once, as films and as history. What are the uses of cinema as a vehicle for thinking about the past? What qualities, other than accuracy, make for good history in films? What are the advantages, if any, of cinematic representation of the premodern past with its different sense of intimacy with the supernatural?

### **HIST 89A British Colonial Violence in the 20th Century**

Course ID: 120484

Faculty: Caroline Elkins

Next Term Offered: 2016 Fall

Will explore Britain's deployment of various forms of violence in its 20th-century empire, and how this violence was understood, justified, and represented in the empire and at home. Imperial objectives and policies will be weighed alongside local factors such as race, settler presence, indigenous responses to colonial rule, and economic and strategic interests to assess the universality and particularity of British colonial violence.

### **HIST 97D What is Environmental History?**

Course ID: 109929

Faculty:

Next Term Offered: 2017 Spring

This section gives new History concentrators an introduction to environmental history. Most historians leave the natural world out of the story, but environmental historians regard nature as the inescapable context for human history, including the human impact on nature. We will explore how the histories of the environment and of humans can (and perhaps should) be written together. Is there a "natural archive" which historians can consult in parallel with conventional libraries and archives? Do places have "biographies," just as people do? Can natural entities (mountains, dogs, rivers, microbes, climate) have "agency" in the same way human actors can?

### **HIST 97F What is Material History?**

Course ID: 109931

Faculty:

Next Term Offered: 2017 Spring

This section offers new History concentrators an overview of the history and anthropology of material culture. Our coverage will range widely across both time and space; major themes will include things created in the deep human past as well as the habits of consumption and even addiction that define our relationship with things in the present day. Do we own things? Or do things own us? Does having more stuff necessarily lead to happiness? Readings will offer students a chance to work not just with history and historical sources, but also art history, literary studies, archaeology, environmental history, and cognitive neuroscience.

### **HIST 97G What is Legal History?**

Course ID: 110444

Faculty:

Next Term Offered: 2017 Spring

Legal history has become a popular pursuit in recent decades, but what does it mean to do legal history? Do lawyers, who routinely review precedent or study the evolution of specific pieces of legislation, do legal history? Do judges, when they reconstruct past events in order to apply the law? Do historians, who use legal documentation? And how is legal history differently done in Europe and in the USA? This section will consider these questions (and others) by analyzing the various ways by which different scholars have approached the relationship between law and history over time, in different locations, and for different ends.

## **HIST 971 What is Biography?**

Course ID: 110446

Faculty: Tamar Herzog

Next Term Offered: 2017 Spring

Biographers write histories of lives. Their storytelling is often novelistic but their standards of evidence are those of the historian. They confront distinctive questions: What lives are worth writing? What is the relationship between the individual and society? What rules govern the relationship between biographers and their subjects? How has the art of biography changed over the centuries, and what forces have driven those changes? In this section, we'll read both notable biographies and the critical literature on biography as a genre that is often seen to be at odds with the conventions of other kinds of historical writing.

## **HIST 1010 History of the Prison**

Course ID: 156019

Faculty: Elizabeth Hinton

Next Term Offered: 2017 Fall

This course provides an introduction to theories of social control, prison practices, and experiences of confinement. Our historical comparison of penal regimes from different time periods and different nations will explore fundamental questions about the purpose of government authority and the role of prisons in society. In the spirit of Nelson Mandela's famous observation that "no one truly knows a nation until one has been inside its jails," this course offers a deep and critical analysis of social exclusion, the contours of state power, and the malleability of the law and its function in various societies over time.

## **HIST 1011 The World of the Roman Empire**

Course ID: 125493

Faculty: Emma Dench

Next Term Offered: 2017 Fall

An introduction to Roman history from the mid third century BCE to the mid third century CE, with emphasis on the multiple cultures of the Roman empire and their diverse involvement in, and perspectives on, Roman conquest and rule. Challenging traditional narratives of Roman political history, we will seek a much more dynamic view of 'Roman' culture and society, based on both literary and archaeological evidence.

## **HIST 1019 Strategy and Crisis**

Course ID: 159782

Faculty: Niall Ferguson

Next Term Offered: 2016 Fall

The moment of crisis is the moment of discrimination: it forces decisions of obvious consequence, pitting rival theories and their proponents against one another. The crisis is par excellence the

moment at which theory and practice meet. This course offers two analytical perspectives based on the study of twelve crises that are frequently seen as turning points in the modern era. To contextualize each crisis, be it political, economic, military, or a combination, we explore what the dominant theories were at the time and how they were deployed in practice in the heat of the crisis. (We may think of this a vertical, historically oriented axis of understanding.) Then we examine the linkages between crises. Are there modes of behavior or thought that are of general utility in such moments? Can strategic thought ever truly claim to be universally applicable. (We may think of this as a horizontal, thematic axis of understanding.) The course at its core is an argument for bringing history back into the core of strategic thought.

### **HIST 1020 A Global History of Modern Times**

Course ID: 114893

Faculty: Charles Maier

Next Term Offered: 2017 Spring

Think big: A historical survey of world societies since the 16th century "encounters," designed to emphasize their interactions and interdependence. Covers transnational forces such as demographic change and migration, religious revivals, industrial development, and upheavals in class, racial and gender relationships. Also follows comparative political transformation within empires and states and the international hierarchies of power, including the impact of the great revolutions, imperialism and war, trade and investment, and cultural diffusion.

### **HIST 1021 International Financial History, 1700 to the Present**

Course ID: 123053

Faculty: Niall Ferguson

Next Term Offered: 2017 Fall

An introduction to modern financial history from the first stock market bubbles to the most recent. Topics include money and banking, public debt and bond markets, corporations and stock markets, investment banking, cross-border capital flows, private insurance and welfare systems, mortgages, consumer credit, privatization, emerging markets, derivatives and hedge funds. Special attention will be paid to the role of financial institutions and financial crises in economic and political development.

### **HIST 1030 Studying Twentieth-Century American History: An Introduction**

Course ID: 110490

Faculty: Brett Flehinger

Next Term Offered: 2016 Fall

Introduces students to historical study by focusing on selected topics in Twentieth-Century American history. The course teaches students how to use the systematic patterns of thought that historians use to recreate and analyze the past. These are patterns of thought common among all historians and the skills and experiences gained will provide students a way to enter historical study across time and geography. Topics include, the history of race-based disfranchisement, the Dust Bowl, the history of birth control, Thoreau's influence on twentieth-century reform movements, and

others.

**HIST 1060 Europe and Its Borders, 950-1550**

Course ID: 156546

Faculty: Daniel Smail

Next Term Offered: 2017 Spring

Surveys an early phase of European expansion and colonial activity in areas including the Iberian Peninsula, Sicily, the eastern Mediterranean, eastern Europe, the Baltic lands, and central Asia. A major goal of the course is to explore how a European identity emerged in the process of contact and conflict in the new borderlands. Readings will include primary and secondary sources.

**HIST 1067 An Introduction to the History of Economic Thought**

Course ID: 127819

Faculty: Emma Rothschild

Next Term Offered: 2016 Fall

The course provides an introduction to the history of economic thought, from Huan K'uan to Adam Smith, Karl Marx and Paul Samuelson; and to economic concepts in historical perspective, from the state and the market to natural resources and financial crises.

**HIST 1206 Empire, Nation, and Immigration in France since 1870**

Course ID: 109409

Faculty: Mary Lewis

Next Term Offered: 2016 Fall

This course explores the history of France from the foundation of the Third Republic to the beginning of the 21st century. Topics include the advent of modern left-wing, right-wing, and anti-Semitic politics; imperial expansion and its consequences; the devastating impact of the First World War; the tumultuous interwar era; the Second World War and the politics of resistance, collaboration, and memory; decolonization; the May 1968 movement; immigration and identity politics since the 1970s.

**HIST 1265 German Empires, 1848-1948**

Course ID: 110285

Faculty: Alison Frank Johnson

Next Term Offered: 2016 Fall

This course examines the history of Germans in Europe and elsewhere, starting with the revolutions of 1848 and ending with the separation of Austria, West Germany, and East Germany following the Second World War. We will consider multiple different visions of what "Germany" should be, what borders it should have, and who should be considered "German."

## **HIST 1266 Central Europe, 1789-1918: Empires, Nations, States**

Course ID: 120895

Faculty: Alison Frank Johnson

Next Term Offered: 2017 Fall

Examines the development of nationalism and socialism as ideologies intended to shape group loyalties, public and private behavior, and political activities of subjects of the continental European empires in the long nineteenth century. Primary focus will be on the Habsburg Empire, with attention paid to other German-speaking lands and to the western territories of the Russian Empire (especially Poland).

## **HIST 1280 History of the Soviet Union, 1917-1991**

Course ID: 113970

Faculty: Terry Martin

Next Term Offered: 2016 Fall

Examines the history of the Soviet Union from the Russian Revolution to Gorbachev's failed reforms. Focus on the period 1928-53 when industrialization, nationalization and political terror created a distinct Soviet society and culture. Readings include novels, short stories, memoirs, Soviet propaganda, high policy deliberations, letters, journalism, songs, jokes, etc.

## **HIST 1281 The End of Communism**

Course ID: 109418

Faculty: Terry Martin

Next Term Offered: 2016 Fall

Examines how and why communism collapsed in the Soviet Union and Eastern Europe. Places the events of 1989/1991, usually considered sudden and shocking, within the political, economic, social, and cultural context of the surrounding decades (1970-2000). Considers both international and domestic factors, including the Cold War and the arms race; ideology and dissent; consumption and culture; oil, economics and the environment; nationalism and civil war; gender and health. Investigates the role of structural conditions and contingency in history.

## **HIST 1290 The History of the Russian Empire**

Course ID: 124508

Faculty: Kelly A. O'Neill

Next Term Offered: 2017 Spring

The history of Russia from the early days of imperial expansion in the sixteenth century to 1917. Topics include the nature of autocratic authority, Russian Orthodoxy, and the integration of non-Russian peoples and territories. We will explore a wide variety of technologies of imperial rule (mapmaking, censorship, religious policy, ethnographic description), as well as the relationship between subjects of the empire (elites, peasants, and everyone in between) and the built and natural environments they inhabited.

### **HIST 1318 History of the Book and of Reading**

Course ID: 121374

Faculty: Ann Blair

Next Term Offered: 2017 Spring

An introduction to the cultural history of the book and its functions as both material object and text. Major themes include the techniques of book production, authorship, popular and learned readership, libraries and censorship. The course surveys developments from scroll to web with a special focus on printing and developments in early modern Europe, 16th-18th centuries.

### **HIST 1322 Heidegger and Arendt**

Course ID: 109402

Faculty: Peter Gordon

Next Term Offered: 2017 Spring

This course investigates the complex philosophical affiliation between Martin Heidegger and Hannah Arendt. Will address how various themes of Heideggerian philosophy were borrowed, displaced, revised, and challenged in Arendt's political theory. The first half of the course addresses texts by Heidegger, esp. selections from *Being and Time*, and *An Introduction to Metaphysics*. The second half of the course addresses Arendt's major theoretical works, *The Origins of Totalitarianism*, *The Human Condition*, and *On Revolution*.

### **HIST 1323 German Social Thought, Nietzsche to Habermas**

Course ID: 126545

Faculty: Peter Gordon

Next Term Offered: 2016 Fall

A philosophical and historical survey of major debates in modern German social theory over the span of a century, from Nietzsche's anti-foundationalist critique of morality and truth to Habermas's attempt to rebuild a pragmatic-transcendentalist theory for ethical and discursive reason after the collapse of metaphysics. Readings by Nietzsche, Weber, Heidegger, Adorno, Horkheimer, and Habermas.

### **HIST 1324 French Social Thought, Durkheim to Foucault**

Course ID: 126546

Faculty: Peter Gordon

Next Term Offered: 2017 Spring

A survey of major themes and debates in modern French social theory over the span of a century, from Durkheim's neo-Kantian theory of the social symbolic to Foucault's conception of the historical a priori, concluding with the recent emergence of neo-liberal conceptions of both history and society. Major readings by Durkheim, Mauss, Sartre, Kojève, Fanon, de Beauvoir, Lévi-Strauss, Lacan, Althusser, Foucault, Lefort, Derrida, and Bourdieu.

### **HIST 1330 Social Thought in Modern America**

Course ID: 111490

Faculty: James Kloppenberg

Next Term Offered: 2017 Spring

An inquiry into American ideas since 1870, examining developments in political and social theory, philosophy, and literature in the context of socioeconomic change. Topics include the breakdown of Victorian idealism and laissez-faire; the emergence of social science and progressivism; conflicts over gender, race, and ethnicity; interwar cultural ferment and political reform; post-World War II theories of consensus and 1960s radicalism; and the consequences for democracy of our contemporary culture of hyper-partisanship.

### **HIST 1390 Understanding Democracy through History**

Course ID: 120921

Faculty: Alex Keyssar

Next Term Offered: 2017 Spring

Examines the evolution of democracies in different nations over extended periods of time, and will focus on one fundamental issue: Under what circumstances or conditions have democracies (or political rights) expanded, and under what circumstances or conditions have they contracted? Readings will include historical studies as well as comparative theoretical works.

### **HIST 1400 Introduction to American Studies**

Course ID: 109441

Faculty: Jill Lepore

Next Term Offered: 2016 Fall

The course is designed primarily for students interested in further study in the field, but all students are welcome. We cover topics, from the seventeenth- to the twenty-first century, in political, social, intellectual, and cultural history. Students read both primary and secondary materials, and receive intensive guidance for their writing.

### **HIST 1433 American Populisms: Thomas Jefferson to the Tea Party**

Course ID: 126293

Faculty: Brett Flehinger

Next Term Offered: 2017 Spring

This course studies the American Populist tradition that defines the common "people" as the centerpiece of American economic and political life and thrives on opposition between the people and "elite" interests. The class focuses on the formal Populist movement and the People's Party of the late nineteenth century, and places this history in broader context, from Jeffersonian tradition through the rise of anti-elitist and anti-government movements characterized by Rush Limbaugh, Sarah Palin, and the rise of the Tea Party.

### **HIST 1434 American Public Life in the 20th Century**

Course ID: 126543

Faculty: Brett Flehinger

Next Term Offered: 2016 Fall

A course covering the major public and political events in America from the administration of Teddy Roosevelt through Ronald Reagan. Focuses on both rising national unity and power, as well as persistent racial, gender, and economic division that conflicted with this unity. Topics include: the Progressive Era, New Deal, World Wars, and Civil Rights Movement, and Watergate.

### **HIST 1445 Science and Religion in American History**

Course ID: 126547

Faculty: Andrew Jewett

Next Term Offered: 2016 Fall

This lecture course explores the complex interactions of science and religion in the United States, with a particular focus on their roles in democratic politics. Beginning with the Scopes trial of 1925, it looks back to the "pan-Protestant establishment" and the Darwinian controversies of the nineteenth century and then proceeds forward to today's debates over abortion and bioengineering. Students read a wide range of primary sources and examine visual material. No previous coursework is required.

### **HIST 1457 History of American Capitalism**

Course ID: 125496

Faculty: Sven Beckert

Next Term Offered: 2018 Spring

Examines the development of the American economy from its beginnings to the present. Focuses on the nature of economic change during the past 400 years and the reasons for and effects of capitalist growth. Topics include Native-American economies, the industrial revolution, slavery, the rise of new business structures, labor relations, and technological change.

### **HIST 1462 History of Sexuality in the Modern West**

Course ID: 126552

Faculty: Nancy Cott

Next Term Offered: 2016 Fall

This course will examine sexual rules and behavior over four centuries in the U.S. and Europe, probing the making of sexual categories such as 'normal' and 'deviant', and asking how understandings of men and women as sexual beings have changed over time. A premise of the course is that human sexual behavior is malleable, and that understanding a society's values about what is right and wrong in sex sheds light on social relations as a whole. Likewise, modes of sexual regulation reveal a social order's priorities. We will consider how popular beliefs, dominant discourses on sexuality and modes of sexual regulation relate to assumptions about class, gender, race, and age.

### **HIST 1511 Latin America and the United States**

Course ID: 108530

Faculty: Kirsten Weld

Next Term Offered: 2016 Fall

Surveys the complex, mutually constitutive, and often thorny relationship - characterized by suspicion and antagonism, but also by fascination and desire - between the United States and the diverse republics south of the Rio Grande. Examines public policy, US expansionism and empire, popular culture and consumption, competing economic development models, migration, tourism, the Cold War, sovereignty, dissent, and contrasting visions of democratic citizenship.

### **HIST 1520 Colonial Latin America**

Course ID: 109436

Faculty: Tamar Herzog

Next Term Offered: 2016 Fall

This course is an introductory survey of colonial Latin American history, spanning the sixteenth to the early nineteenth century. Organized chronologically and thematically, it will examine developments in Spanish and Portuguese America by reading both secondary and primary sources (available in English translation).

### **HIST 1526 European Legal History**

Course ID: 110422

Faculty: Tamar Herzog

Next Term Offered: 2016 Fall

This is a survey course of the history of European law from the fall of the Roman Empire (5th century) to the establishment of the European Union (20th century). Organized chronologically, it engages with the sources and nature of Law, the organization of legal systems and the relationship between law and society, law and law-maker, law and the legal professions. Continental and Common Law, as well as Colonial law would be covered.

### **HIST 1700 The History of Sub-Saharan Africa to 1860**

Course ID: 124404

Faculty: Emmanuel Akyeampong

Next Term Offered: 2016 Fall

Survey of sub-Saharan Africa to 1860, with attention to the range of methodologies used in writing early African history, including oral history, archaeology, and anthropology. Will address themes of the impact of climate change on migration and settlement, trade and commerce, state formation, slavery, and the impact of Islam and Christianity on the continent. Will provide a methodological and historiographical framework in which more specific historical processes and events may be placed and understood.

### **HIST 1701 West Africa from 1800 to the Present**

Course ID: 140979

Faculty: Emmanuel Akyeampong

Next Term Offered: 2018 Spring

The course explores the internal dynamics of West African states from 1800, and West Africa's relations with the wider world. Innovations in science, technology and finance made the 19th century an era of social and economic opportunity and of political experimentation; a phase curtailed by European imperialism. The course examines African perspectives on colonialism, the two world wars, nationalism, and the transfer of political power. We will review post-colonial political economies and the search for workable political and economic models.

### **HIST 1704 Slavery and Slave Trade in Africa and the Americas**

Course ID: 114917

Faculty: Emmanuel Akyeampong

Next Term Offered: 2016 Fall

This course begins with the question of terminological precision and the definition of slavery and other forms of servile labor\_ especially in Africa. The course then examines the institution of slavery in Africa and the Americas within this wider historical context, analyzing the political economies and ideologies that underpin slavery and the crucial role of slave trade in reproducing slave communities that were barely able to reproduce themselves naturally. The course explores the impact of slavery on political, economic, social, and cultural life in Africa and the Americas and ends with a discussion of the legacy of slavery and the global nature of the African diaspora.

### **HIST 1878A Ottoman State and Society I (1300-1550)**

Course ID: 142695

Faculty: Cemal Kafadar

Next Term Offered: 2017 Fall

Surveys the emergence of the Ottoman state from a frontier principality into a world empire in its social, political and cultural dimensions. Topics include pre-Ottoman Anatolia; frontier society; methods of conquest; centralization and institutionalization of power; land regime and peasantry; urbanization; intercommunal relations; religion and learning; architecture and literature. Relations with Byzantium as well as Islamic and European states are examined.

### **HIST 1912 History Design Studio**

Course ID: 109422

Faculty: Vincent Brown

Next Term Offered: 2016 Fall

Weekly seminar and studio for multimedia history. The course encourages students to design new modes of historical storytelling by embedding historians' core values and methods in the innovative products of artisanship and craft. Extensive use of primary sources, attention to processes of

change over time, keen historiographical awareness, and an overarching respect for evidence will guide a range of multimedia historical projects.

### **HIST 1913 Dirty Wars, Peace Processes, and the Politics of History in Latin America**

Course ID: 108531

Faculty: Kirsten Weld

Next Term Offered: 2016 Fall

Latin America's "dirty wars" generated intense struggles over historical memory. Course focuses on Chile, Argentina, El Salvador, and Guatemala, and comparatively examines how societies reckon with bloody recent pasts that are anything but settled. Looks at both these countries' dictatorships and their fraught peace processes (including truth commissions, transitional justice, artistic representations, human rights activism, international law, foreign involvement, backlash) in order to probe the stakes and politics of historical interpretation.

### **HIST 1915 The Nine Lives of Benjamin Franklin**

Course ID: 119039

Faculty: Joyce Chaplin

Next Term Offered: 2016 Fall

Examines the eighteenth century through some of the many lives of Benjamin Franklin. Students analyze in depth one of these lives, or identify and explore yet another, to better comprehend Franklin and the worlds in which he lived: colonial America, British empire, independent US, books, science, popular culture, politics, war, social reform, personal improvement, and many others.

### **HIST 1916 The History of Evidence**

Course ID: 110442

Faculty: Jill Lepore

Next Term Offered: 2018 Spring

This course will examine the rules and standards of evidence in law, history, science, and journalism. What counts as proof in these fields varies and has changed over time, often wildly. Emphasis will be on the histories of Western Europe and the United States, from the middle ages to the present, with an eye toward understanding how ideas about evidence shape criminal law and with special attention to the rise of empiricism in the nineteenth century, the questioning of truth in the twentieth, and the consequences of the digital revolution in the twenty-first. Topics will include the histories of trial by ordeal, trial by jury, "spectral evidence," "negro evidence," case law, scientific testimony, footnotes, the polygraph, statistics, anonymous sources, fact checking, and big data.

### **HIST 1922 Habermas: Social Theory in Postwar Germany**

Course ID: 109446

Faculty: Peter Gordon

Next Term Offered: 2016 Fall

This conference course explores the thought of Jürgen Habermas, the foremost social theorist of Germany in the post-1945 era. The course combines philosophical methods of rational reconstruction with an historical sensitivity to context. While devoting primary attention to his major contributions to philosophy and social theory, we will also consider Habermas' role as a public intellectual, in, e.g., the 'historians' controversy' and the debates surrounding German unification. Major readings include: *Knowledge and Human Interests*, *The Structural Transformation of the Bourgeois Public Sphere*, *The Theory of Communicative Action* (Volumes I and II), and *Between Facts and Norms*.

### **HIST 1923 Japan's 2011 Disasters and Their Aftermath: A Workshop on Digital Research**

Course ID: 109459

Faculty: Andrew Gordon

Next Term Offered: 2016 Fall

The course explores the historical and ethnographic contexts of Japan's compound disasters of March 2011. As people sought to survive and make sense of the disasters, social media as well as photos, videos and websites played critical roles. We examine the role of these records, using a participatory digital archive developed at Harvard. Student teams will develop research questions, collect digital material, and create multimedia narratives. Students will complement their research with study of responses to similar global events as well as critical reflection on digital scholarship and the emerging practice of "crisis archiving."

### **HIST 1925 Europe and its Other(s)**

Course ID: 109437

Faculty: Tamar Herzog

Next Term Offered: 2016 Fall

This course examines how Europeans interacted with those they considered different inside and outside Europe during the Medieval and the Early Modern periods. Reading will alternate between primary and secondary sources.

### **HIST 1926 How Historians Imagine Latin American Pasts**

Course ID: 110423

Faculty: Tamar Herzog

Next Term Offered: 2017 Fall

This course examines how our image of Latin American past(s) changed in last decades in order to introduce students to some of the major debates and recent developments in history and the art of history making. Among other things, it examines issues of periodization, comparative and Atlantic history, the nature of the sources and their interpretation, the use of notions such as "crisis," "decline," and "corruption," the object historians reconstruct, and the contribution of subaltern studies and postcolonialism to the study of Latin America.

### **HIST 1933 Beauty and Power**

Course ID: 159560  
Faculty: Genevieve Clutario  
Next Term Offered: 2017 Spring

This course calls us to think through systems of power through beauty and examine the processes of defining beauty as associated with the body and bodily presentations. Drawing from the scholarship, methods and theoretical interventions and practices of transnational feminist studies, postcolonial studies, poststructuralism, Third World feminisms, race and ethnic studies feminism, we will investigate the role of power in the investment in beauty and beauty practices. Moreover, we will explore the different temporal and spatial contexts in which beauty was used to create and sustain hierarchies of difference based on gender, race, class, and sexuality.

### **HIST 1935 Byzantine Imperialism**

Course ID: 110448  
Faculty: Dimitar Angelov  
Next Term Offered: 2018 Spring

The Byzantine Empire is perhaps best known today as the medieval successor to imperial Rome and as a model for later empires in the Eastern Mediterranean and Eastern Europe. The course investigates imperialism both as an idea and as a practice in Byzantium. We will focus on a variety of themes, such as the role of Constantinople, the methods of governance, the role of coercive and soft power, the integration of diverse communities, the views of empire among the inhabitants of the capital, provincials, and frontiersmen. Primary sources and important secondary works will enable us to examine the specificity of Byzantine imperialism and gain deeper insight into empire as a historical phenomenon.

### **HIST 1937 Social Revolutions in Latin America**

Course ID: 159555  
Faculty: Alejandro de la Fuente  
Next Term Offered: 2017 Spring

This course seeks to explain why social revolutions have taken place in Latin America and analyzes their impact on the region. The objective is for students to gain a critical understanding of the origins, development, and impact of revolutionary movements in Latin America during the twentieth century. The course examines several case studies, which may include Mexico, Cuba, Chile, Nicaragua, the Zapatista uprising in Chiapas, and the so-called "Bolivarian revolution" of Venezuela. Our goal is to identify similarities and differences among these cases.

### **HIST 1940 Science and the Global Human Past: Case Studies at the Cutting Edge**

Course ID: 108121  
Faculty: Michael McCormick  
Next Term Offered: 2017 Spring

Examines recent and ongoing discoveries that show how the natural sciences are revolutionizing understanding of the human past across temporal and geographic boundaries. Topics include how archaeology, history and science illuminate and are illuminated by Jomon Pottery, ancient and

medieval coins, silk, climate change, and genomics. Mixes classic classroom, seminar-style teaching with classes held as field-trips to New England museums, landscapes and laboratories.

### **HIST 1995 Strategy and Crisis**

Course ID: 156590

Faculty: Niall Ferguson

Next Term Offered: 2018 Spring

The moment of crisis is the moment of discrimination: it forces decisions of obvious consequence, pitting rival theories and their proponents against one another. The crisis is par excellence the moment at which theory and practice meet. This course offers two analytical perspectives based on the study of twelve crises that are frequently seen as turning points in the modern era. To contextualize each crisis, be it political, economic, military, or a combination, we explore what the dominant theories were at the time and how they were deployed in practice in the heat of the crisis. (We may think of this a vertical, historically oriented axis of understanding.) Then we examine the linkages between crises. Are there modes of behavior or thought that are of general utility in such moments? Can strategic thought ever truly claim to be universally applicable. (We may think of this as a horizontal, thematic axis of understanding.) The course at its core is an argument for bringing history back into the core of strategic thought.

### **HIST 2050 Medieval Societies and Cultures: Proseminar**

Course ID: 143662

Faculty: Daniel Smail

Next Term Offered: 2016 Fall

Introduction to the study of medieval history and to the literature basic to the examination field. Readings include both canonical works as well as recent studies. Though designed for specialists in medieval European history, the course welcomes all non-specialists interested in exploring large issues of comparative history and chronological depth.

### **HIST 2111 Humanism and the Classical Tradition in the Italian Renaissance: Seminar**

Course ID: 124502

Faculty: James Hankins

Next Term Offered: 2016 Fall

Topics include the Renaissance revivals of ancient philosophical schools, the development of the classical literary genres in Renaissance literature, the history of philology, and the "virtue politics" of the Italian humanists. Reading knowledge of Latin and Italian useful but not necessary.

### **HIST 2113 Dante in Contexts: Seminar**

Course ID: 156059

Faculty: James Hankins

Next Term Offered: 2017 Fall

The greatest poet of the Middle Ages, Dante was also a philosopher and theologian, a theorist of language, and a political thinker. In this course we will read through the entire corpus of Dante's works, examining each in a different context. The contexts will include the literary traditions of courtly love and true nobility, scholastic philosophy and theology, contemporary history and political theory. The reception of Dante's works in the Renaissance and later times will also be considered.

**HIST 2250 Interpreting Europe's Twentieth Century: Seminar**

Course ID: 108079

Faculty: Charles Maier

Next Term Offered: 2017 Spring

Historical and theoretical analyses of crises and transformation: critiques of liberalism; fascism and communism; legacies of world war and empire; postwar institutional constructions including the EU; ideological revival from the 1960s to the collapse of communism; the rise and attrition of a European civil society.

**HIST 2258 Histories of the Future (Graduate Seminar in General Education)**

Course ID: 156373

Faculty: Alison Frank Johnson

Next Term Offered: 2016 Fall

The seminar will consider how individual people and groups in the past thought about and planned for the future. Specific topics can include the history of: insurance; speculation; engineering and unintended environmental consequences; climate change; population growth (or decline) and social planning; education and "disruption." Our object will be to design an undergraduate course that encourages students to look critically at how we think we can plan for the future in the present.

**HIST 2259 Readings in Central European History: Proseminar**

Course ID: 108442

Faculty: Alison Frank Johnson

Next Term Offered: 2017 Spring

Introduces students to recent and classic literature on German-speaking Europe as well as the Habsburg Empire, the Polish-Lithuanian Commonwealth, and their successor states. Some discussion of Southeastern Europe. Reading knowledge of German or another approved Central/Eastern European language advisable, but not required. Open to graduate students and qualified undergraduates with permission of the instructor.

**HIST 2272 The Soviet Union: Seminar**

Course ID: 122848

Faculty: Terry Martin

Next Term Offered: 2017 Spring

Introduction to archival and primary sources, as well as major historiographical debates. Primary

focus on major research paper.

### **HIST 2275HF Subjectivities and Identities in Russia and Eurasia: Seminar**

Course ID: 109410

Faculty: Terry Martin

Next Term Offered: 2016 Fall

Year-long bi-weekly seminar on collective and personal identities in the history, culture, and politics of Russia, Eastern Europe and Central Asia. Key questions: where and how are identities formed (in domestic, public, textual, and virtual spaces)? What factors constrain, promote, and shape identity formation? What theories of self-expression help us understand the region? How are identities and subjectivities similar? How are they different?

### **HIST 2284 Digital History Seminar: from 101 to 3.0**

Course ID: 109811

Faculty: Kelly A. O'Neill

Next Term Offered: 2017 Spring

Exploration of the landscape of digital history from the perspectives of both theory and practice. Students will examine major debates in the field, assess groundbreaking projects, and apply digital history methods to their own research.

### **HIST 2300 Methods in Intellectual History: Proseminar**

Course ID: 124505

Faculty: David Armitage

Next Term Offered: 2016 Fall

Introduction to advanced research in intellectual history with special reference to philosophy and political thought. Readings will include primary and secondary materials drawn from East-Asian and Euro-American traditions.

### **HIST 2322 Adorno: Philosophy, Sociology, Aesthetics: Seminar**

Course ID: 109761

Faculty: Peter Gordon

Next Term Offered: 2017 Spring

This seminar explores the work of the philosopher and social theorist Theodor W. Adorno, a leading member of the Institute for Social Research. Moving chronologically and thematically through his major works, we will discover how Adorno applied his inimitable manner of critical reflection to issues such as the dialectic of enlightenment, the social implications of psychoanalysis, the cultural reification of consciousness, and the redemptive promise of autonomous art in a capitalist age. Readings include selections from: Dialectic of Enlightenment, Minima Moralia, Negative Dialectics, and Aesthetic Theory. Open only to graduate students, advanced undergraduates at instructor's discretion.

**HIST 2324 Contesting Political Theology and Secularization: Schmitt, Löwith, Blumenberg: Seminar**

Course ID: 110496

Faculty: Peter Gordon

Next Term Offered: 2017 Spring

The political and legal theorist Carl Schmitt famously observed that "All significant concepts of the modern theory of the state are secularized theological concepts." But what does it mean to secularize a concept? This graduate-level seminar will explore the controversy and aftermath of this political-theological dictum by considering the broader history of theoretical debate concerning the place of religion in the modern world. We will focus on works by Carl Schmitt together with his many interlocutors, including Walter Benjamin, Jacob Taubes, and Erik Peterson, with special attention to the postwar debate over secularization between Karl Löwith and Hans Blumenberg.

**HIST 2330 Ideas in Europe in the 18th Century: Seminar**

Course ID: 119114

Faculty: Emma Rothschild

Next Term Offered: 2017 Fall

A graduate seminar which examines a number of 18th century writings (by Hume, Smith, Wollstonecraft, and Condorcet) and ideas (enlightenment, religion, empire), and explores different ways of writing about the history of ideas.

**HIST 2350 Research Seminar in the History of Education: Seminar**

Course ID: 126517

Faculty: Julie Reuben

Next Term Offered: 2016 Fall

This course offers students the opportunity to conduct original research in the history of education.

**HIST 2401 Early American Social History: Seminar**

Course ID: 109561

Faculty: Laurel Ulrich

Next Term Offered: 2017 Spring

Research culminating in the production of a scholarly essay. Some prior knowledge of the period assumed.

**HIST 2403 Working with Harvard Collections: Research Seminar**

Course ID: 109562

Faculty: Laurel Ulrich

Next Term Offered: 2017 Spring

Participants in the seminar will explore Harvard's vast collections of tangible things, from rocks to medical specimens to works of art, as sources for the writing and teaching of history. Although the emphasis will be on American history, students from other fields are welcome.

**HIST 2404 Themes in Mormon History: Seminar**

Course ID: 107981

Faculty: Laurel Ulrich

Next Term Offered: 2016 Fall

This seminar will explore recent scholarship on nineteenth and early twentieth century Mormonism and guide students in developing independent research projects on selected topics of their choice

**HIST 2414 The American Attic (Graduate Seminar in General Education)**

Course ID: 109744

Faculty: Jill Lepore

Next Term Offered: 2017 Fall

This interdisciplinary graduate seminar is dedicated to developing an undergraduate course on the attic as both a place and a realm of the imagination. Students will explore the historical and aesthetic richness of archives.

**HIST 2426 Topics in the History of Gender and Sexuality: Research Seminar**

Course ID: 110506

Faculty: Nancy Cott

Next Term Offered: 2016 Fall

This seminar is open to graduate students who are acquainted with using gender and/or sexuality as categories of historical analysis and are ready to undertake relevant historical research. The bulk of the term will be devoted to individual (or collaborative) research projects, with the completion of a 25- to 30-page paper required. Topics for research are open. The seminar is centered around U.S. historiography, but participants working in non-U.S. and/or comparative/international history are welcome to apply.

**HIST 2442 Readings in the History of the U.S. in the 19th Century: Proseminar**

Course ID: 114882

Faculty:

Next Term Offered: 2017 Spring

The second in the sequence of three proseminars required of all graduate students in American history and open to graduate students in other history fields and other departments as space permits.

### **HIST 2477 History of American Economic Regulation: Seminar**

Course ID: 156896

Faculty: Kenneth Mack

Next Term Offered: 2017 Spring

This course examines the history of capitalism in America, viewed through the lens of debates over regulation of economic activity. Beginning in the early days of the republic, it will examine the role of law in capitalist development, focusing on debates over the regulation of corporations, banking and the financial system, antitrust, and administrative law, continuing through the regulatory reforms of the New Deal. It will then examine movements for deregulation, the roots of the financial crisis, and recent proposals to regulate banks and other financial institutions. The course will examine the social, institutional and intellectual history of economic regulation.

### **HIST 2480HF The Political Economy of Modern Capitalism: Seminar**

Course ID: 117955

Faculty: Sven Beckert

Next Term Offered: 2016 Fall

A year-long research and reading course on the history of capitalism during the past 300 years.

### **HIST 2495 Politics and Social Movement in the 20th Century United States: Research Seminar**

Course ID: 126555

Faculty: Lisa McGirr

Next Term Offered: 2017 Fall

Seminar culminating in the production of an article length essay based on primary research. Students will conduct research into significant topics at the intersection of the state and civil society in the twentieth-century United States.

### **HIST 2511 Rethinking the Archive: Proseminar**

Course ID: 109563

Faculty: Kirsten Weld

Next Term Offered: 2017 Spring

This seminar provides a critical examination of the documentary and archival forms that lie at the heart of historical knowledge production. Readings span disciplinary boundaries, geographic regions, and time periods.

### **HIST 2692 Colonial and Post-Colonial Histories of South Asia: Seminar**

Course ID: 116677

Faculty: Sugata Bose

Next Term Offered: 2016 Fall

Analyzes trends and debates in historical research and writing on colonial and post-colonial South Asia.

**HIST 2708 Sources, Methodology, and Themes in African History: Seminar**

Course ID: 117941

Faculty: Emmanuel Akyeampong

Next Term Offered: 2017 Spring

Seminar to equip graduate students with the necessary tools for archival research and fieldwork, as well as to introduce them to recent approaches in the historiography.

**HIST 2725 History and Anthropology: Seminar**

Course ID: 110313

Faculty: Vincent Brown

Next Term Offered: 2017 Spring

Explores exchanges between the disciplines of History and Anthropology, emphasizing overlaps and distinctions in the treatment of mutual concerns such as the representation of time and space, the conceptualization of power, and the making of the subject.

**HIST 2884 Topics in Ottoman Social and Cultural History: Seminar**

Course ID: 147101

Faculty: Cemal Kafadar

Next Term Offered: 2018 Spring

Topic to be announced.

**HIST 2906 International History: Seminar**

Course ID: 113993

Faculty: Erez Manela

Next Term Offered: 2016 Fall

This course explores new approaches to the international history of the twentieth century. We probe problems of scope, theme, narrative strategy, research method, and sources, among others.

**HIST 2921 Western Ascendancy: Historiography and Pedagogy: Seminar**

Course ID: 126397

Faculty: Niall Ferguson

Next Term Offered: 2016 Fall

The purpose of this graduate seminar is to get Teaching Fellows and other graduates to engage with the historiographical and pedagogical challenges of the General Education course, Societies of the World 19: Western Ascendancy. Courses in Western Civilization are nowadays widely seen

as outmoded and excessively Eurocentric. The aim of SW 19 is to address questions of global economic and political divergence in a fresh way, taking advantage of more recent literature on economic history, for example.

**HIST 2926 Empires Compared: Proseminar**

Course ID: 107959

Faculty:

Next Term Offered: 2017 Spring

What do empires have in common, and what makes each distinct? Course undertakes thematic approach to imperial history via culture, economics, governance, and more. Open to students across subfields; emphasis on teaching and exam preparation.

**HIST 2951 The Environmental Turn in History: Seminar**

Course ID: 128257

Faculty: Ian J. Miller

Next Term Offered: 2018 Spring

A critical exploration of history's "environmental turn." This course tracks the movement of environmental themes to the center of the discipline and the emergence of environmental history as an important new subfield. Readings will range from classics to cutting-edge new work.

**HIST 2965 The Scope of History: Seminar**

Course ID: 121618

Faculty: Mary Lewis

Next Term Offered: 2016 Fall

Explores the historical method by considering the wide array of "levels" of analysis or foci that historians adopt, from local and national to transnational, comparative and global; considers the relationship between scope and problematic.

## History of Science

### **HISTSCI 106 History of Ancient Science**

Course ID: 113535

Faculty:

Next Term Offered: 2016 Spring

An examination of key aspects and issues in the development of ancient science, focusing on natural philosophy from the Presocratics to Aristotle as well as its relation to early Greek medicine and mathematics. Some consideration will also be given to the historiography of natural philosophy within this period.

### **HISTSCI 109 Science and Islam: Agents, Places, and Controversies**

Course ID: 126395

Faculty: Ahmed Ragab

Next Term Offered: 2016 Fall

This course addresses the interactions, dialogues and debates of science and religion (with a focus on Abrahamic religions) in the Middle East from the medieval period to the present. It begins by focusing on ontological, epistemological and legal/ethical aspects of these interactions and trace how such debates were manifested in various economic and sociopolitical situations and in legal and philosophical debates. The course devotes a number of sessions to discuss case-studies representing questions of gender, sexuality and race. The materials and discussions in the course will be interdisciplinary in nature with some emphasis on social history, history, philosophy and sociology of science, religious studies, gender and sexuality studies and Middle East history.

### **HISTSCI 118 Instruments and the Material Culture of Science in Early Modern Europe, 1500-1800**

Course ID: 108927

Faculty: Jean-Francois Gauvin

Next Term Offered: 2016 Fall

What is an instrument? Can there be more than one definition? What, if any, is the epistemological difference between Galileo's telescope and rolling balls? Between Newton's prisms, Hooke's microscope, and Réaumur's thermometer? This course looks at three centuries of science and particularly at its material culture. What makes an "instrument" a "scientific" instrument? Are all instruments "scientific"? How does an object become a scientific instrument? What are the relationships between theory and instruments? Readings and discussion, though at the core of the course, will be supplemented with visits in other Harvard museums and hands-on classes using the Collection of Historical Scientific Instruments.

### **HISTSCI 122V Science and the Cold War**

Course ID: 109843

Faculty:

Next Term Offered: 2017 Spring

The Cold War was an era of unprecedented growth in the sciences -- and unprecedented political stakes for scientific research. This course will cover the history of the physical, biological, and human sciences during the Cold War. We will look at science on both sides of the Berlin Wall, paying particular attention to intersections between science, politics, and governments. Topics will include the Manhattan Project, the development of "big science," genetics and Lysenkoism, the nuclear arms race and the space race, scientific espionage, and communication between scientists in the West and in the Soviet world.

### **HISTSCI 149 The History and Culture of Stigma**

Course ID: 110099

Faculty: Allan Brandt

Next Term Offered: 2017 Spring

This course will investigate the history of a number of stigmatized conditions and diseases including, for example, cancer, mental illness, addiction, obesity, AIDS, and disability. A central goal will be to understand the stigmatization of disease and its effects in diverse historical and cultural contexts. The course will evaluate both the impact of stigmatization on health disparities and outcomes, as well as attempts to de-stigmatize conditions that are subject to discrimination, prejudice, and isolation.

### **HISTSCI 178V History of the Psychotherapies**

Course ID: 156325

Faculty: Elizabeth Lunbeck

Next Term Offered: 2016 Fall

Examines the history of the current psychotherapeutic landscape, looking at the development, methods, aims, efficacy, and limitations of a range of psychotherapeutic modalities from Freud's time to our own, among them psychoanalytic, psychodynamic, cognitive, behavioral, manualized, and evidence-based treatments; individual, play, family, and group therapies. Explores tensions between therapy as a quest for self-improvement and a means of relieving symptoms, between focusing on cognition and on behavior, and between mind and brain. Looks at providers and patients, at the testimonies of writers and poets, and at office-based, hospital, and computer therapies. The question of the relationship between professional practices and the rise of a popular therapeutic sensibility is central to the course.

### **HISTSCI 238 Rethinking the Darwinian Revolution: Seminar**

Course ID: 122166

Faculty: Janet Browne

Next Term Offered: 2017 Fall

Taking Charles Darwin as a well-documented case study, we will explore the historiography of evolutionary ideas from 1900 onwards, covering the political, social, and scientific commitments involved in the concept of a "Darwinian Revolution." We take a special interest in tracking evolutionary ideas in Victorian literature. There will be an opportunity for graduate students to read key Darwin texts and put together their own syllabus on the history of Darwinism.

**HISTSCI 247 Current Issues in the History of Medicine: Seminar**

Course ID: 111679

Faculty: Allan Brandt

Next Term Offered: 2016 Fall

Explores new methods for understanding disease, medicine, and society, ranging from historical demography to cultural studies. Topics include patterns of health and disease, changes in medical science and clinical practice, the doctor-patient relationship, health care systems, alternative healing, and representations of the human body. (DF:M1,M2)

**HISTSCI 248 Ethics and Judgment in the History of Science and Medicine**

Course ID: 107682

Faculty: David Shumway Jones

Next Term Offered: 2017 Spring

Examines the tensions felt by historians and physicians between historicizing past ethical behaviors and norms and wanting to pass judgment on past actors and actions. Topics include contested diseases and accusations of unethical research; the focus in Spring 2014 will be on controversial therapeutics.

## Humanities

### **HUMAN 51 Major Themes in the Humanities: Love and Freedom**

Course ID: 156527

Faculty: John T. Hamilton

Next Term Offered: 2017 Spring

Notions of "love" and "freedom" have persistently informed works of literature, visual art, and music since antiquity, exhibiting a complex variety of meanings, functions and values. The aim of this course is to investigate exemplary works that highlight some of the major tensions and questions related to distinct formulations of these two key terms. In reviewing a broad range of material, attention is paid throughout to specific historical, social, and cultural differences.

### **HUMSTUDI 3 Architectures of the Book: Book Making - Past, Present, Future**

Course ID: 156486

Faculty: Jeffrey Schnapp

Next Term Offered: 2016 Fall

Contemporary speculations regarding print-plus or post-print publishing represent just the latest in the legion of mutations undergone by that most venerable and resistant of literary supports: the book. This Humanities Studio explores the past, present, and future of books as designed and programmable artifacts from both a historical and hands-on perspective. Book making in a broad array of consolidated and experimental forms will serve both as object of critical study and focus for projects, as students explore and evaluate claims about the history of books by making them in paper, pixels, and other media.

## Linguistics

### **LING 104 Word Structure**

Course ID: 125790

Faculty:

Next Term Offered: 2016 Fall

This course investigates the nature and structure of words through the lens of contemporary morphological theory. What's in a word? Topics include the place of word formation in relation to phonological and syntactic phenomena, morphological processes, and the nature of the lexicon. Emphasis on the analysis of morphological phenomena in a range of typologically diverse languages.

### **LING 107 Introduction to Indo-European**

Course ID: 110658

Faculty:

Next Term Offered: 2017 Spring

An introduction to the historical study of the Indo-European languages, using the comparative method to arrive at a picture of the parent language of the family, Proto-Indo-European.

### **LING 114 Morphological Theory**

Course ID: 111957

Faculty:

Next Term Offered: 2016 Fall

This course provides an intensive introduction to morphological theory. Students will be introduced to current research and areas of debate in morphology proper, in morpho-syntax, and in morpho-phonology.

### **LING 117R Linguistic Field Methods**

Course ID: 123611

Faculty:

Next Term Offered: 2017 Spring

Instruction in the elicitation of phonological, morphological, and syntactic information from a native speaker of an unfamiliar language, with the object of developing a grammatical sketch of the language. Emphasis on methodology and problems of elicitation and grammatical description in the field. Participants work directly with the native speaker, both individually and as a group, with the assistance of the instructor.

### **LING 123 Intermediate Indo-European**

Course ID: 123440

Faculty:

Next Term Offered: 2017 Spring

Designed as a sequel to Linguistics 107. A detailed overview of Indo-European comparative grammar, with emphasis on recent developments and discoveries.

### LING 132 **Psychosemantics**

Course ID: 123448

Faculty:

Next Term Offered: 2016 Fall

Explores issues at the interface of linguistic semantics, pragmatics and psychology. Introduces how the analysis of meaning has been pursued by linguists and psychologists. Focuses on topics that are both of central interest to theoretical linguistics and the target of experimental research. These include sentence structure, sentential connectives, quantification, numbers, mass-count distinction, adjectives and comparison, scales and modalities.

### LING 146 **Syntax and Processing**

Course ID: 122516

Faculty:

Next Term Offered: 2017 Spring

Selected grammatical phenomena will be examined from a theoretical and experimental perspective, with a view toward answering questions like the following: What theoretical treatments are available? How do experimental studies distinguish among competing theoretical approaches? What kind of future experimental work is needed to resolve the outstanding issues?

### LING 148 **Language Universals**

Course ID: 123446

Faculty:

Next Term Offered: 2017 Spring

Provides an introduction to the study of cross-linguistic variation and analyzes alternative approaches to language universals (functional explanations, processing explanations, explanations in terms of universal grammar). Topics to be studied include word order, case marking, agreement, lexical categories, subject-hood, and information structure. Sampling techniques and the use of hierarchies will also be covered.

### LING 152 **Prosody and Intonation**

Course ID: 123619

Faculty:

Next Term Offered: 2017 Spring

Prosody and intonation are intricately linked to many domains of language use and linguistic structure. We examine the phonetic form of prosodic contours and intonational grouping, the

function of prosody in expressing semantic and pragmatic information and in disambiguation during sentence production and comprehension, and the use of "implicit" prosody even in silent reading.

**LING 168 Introduction to Germanic Linguistics**

Course ID: 122755

Faculty:

Next Term Offered: 2017 Spring

An introduction to the comparative and historical linguistics of the Germanic family, with emphasis on Gothic and the early medieval languages.

**LING 171 Structure of Chinese**

Course ID: 115947

Faculty:

Next Term Offered: 2017 Spring

Introduction to the syntactic structure of Mandarin Chinese: the basic structure of clauses and nominal constituents; words, compounds, and phrases; word order and variations; selected special topics (passives, resultatives, ba-construction, topic and relativized structures, questions, anaphora, pro drop); syntactic structure and semantic interpretation.

**LING 174 Tense and Aspect in Japanese**

Course ID: 123350

Faculty:

Next Term Offered: 2017 Spring

Examination of phenomena of tense and aspect in Japanese, with special attention to verbal semantics and the interaction of temporal categories with modality and transitivity.

**LING 175 Structure of Japanese**

Course ID: 119018

Faculty:

Next Term Offered: 2017 Spring

Introduction to the syntactic structure of Modern Japanese: the structure of clauses and noun phrases and other constituents; selected special topics such as word order and scrambling, relative clauses and other sentence modifiers, passives and causatives, case marking, etc., as they pertain to linguistic theory.

**LING 176 History and Prehistory of the Japanese Language**

Course ID: 114299

Faculty:

Next Term Offered: 2017 Spring

An examination of evidence from the comparative method, internal reconstruction, and written documents for reconstructing prehistoric stages of the Japanese language and an overview of major developments in Japanese phonology and grammar from the Nara period through the present day

**LING 185R Issues in Austronesian Linguistics**

Course ID: 125820

Faculty:

Next Term Offered: 2017 Spring

This course is an in-depth investigation into comparative Austronesian syntax. The Austronesian language family -- roughly 1,200 genetically-related languages dispersed over an area encompassing Madagascar, Taiwan, Southeast Asia, and islands of the Pacific -- exhibits several unusual properties: verb-first word order, ergativity, wh-agreement, articulated voice systems, and cleft structures. The course examines these phenomena from the perspective of comparative Austronesian syntax.

**LING 219R Advanced Phonology**

Course ID: 111288

Faculty:

Next Term Offered: 2017 Spring

An examination of why phonological phenomena exist at all, and the nature of phonological computation. Primarily exemplification from harmony, reduplication, and meter. Design conditions imposed by economy, perception, articulation, the learning path, and the lexicon.

**LING 225A Introduction to Hittite**

Course ID: 123132

Faculty:

Next Term Offered: 2016 Fall

Grammar and reading of texts in cuneiform and in transliteration; essentials of the comparative grammar of the Indo-European languages of Anatolia.

**LING 226R Advanced Hittite**

Course ID: 124027

Faculty:

Next Term Offered: 2017 Spring

Advanced readings in Hittite and an introduction to Cuneiform and Hieroglyphic Luvian.

**LING 247 Topics in Germanic Linguistics**

Course ID: 113352  
Faculty:  
Next Term Offered: 2017 Spring

Investigation of selected topics in Germanic historical linguistics.

### **LING 287 Topics in Computational Linguistics and Natural Language Processing**

Course ID: 156632  
Faculty:  
Next Term Offered: 2018 Spring

In-depth investigation of topics in computational linguistics and natural-language processing. Students discuss research papers and undertake a significant research project. This term, the course will focus on synchronous grammars and their use for formal modeling of the semantics of natural language, including background on Montague grammar, pertinent logic, lambda calculus, applications to machine translation and other language-processing problems. The course is being offered jointly with the computer science program as Computer Science 287r, with computationally-oriented final projects. Students may not take both Computer Science 287r and Linguistics 287 for credit. Computer Science 187 or Linguistics 116 or permission of instructor.

## Mathematics

### **MATH 117 Probability and Random Processes with Economic Applications**

Course ID: 127947

Faculty:

Next Term Offered: 2017 Spring

A self-contained treatment of the theory of probability and random processes with specific application to the theory of option pricing. Topics: axioms for probability, calculation of expectation by means of Lebesgue integration, conditional probability and conditional expectation, martingales, random walks and Wiener processes, and the Black-Scholes formula for option pricing. Students will work in small groups to investigate applications of the theory and to prove key results.

### **MATH 141 Introduction to Mathematical Logic**

Course ID: 117615

Faculty:

Next Term Offered: 2016 Fall

An introduction to mathematical logic with applications to computer science and algebra. Formal languages. Completeness and compactness of first order logic. Definability and interpolation. Decidability. Unsolvable problems. Computable functions and Turing machines. Recursively enumerable sets. Transfinite induction.

### **MATH 224 Representations of Reductive Lie Groups**

Course ID: 125563

Faculty:

Next Term Offered: 2017 Spring

Structure theory of reductive Lie groups, unitary representations, Harish Chandra modules, characters, the discrete series, Plancherel theorem.

### **MATH 233BR Theory of Schemes II**

Course ID: 123479

Faculty:

Next Term Offered: 2017 Spring

A continuation of Mathematics 233a. Will cover the theory of schemes, sheaves, and sheaf cohomology.

Medical Sciences

**BCMP 228 Macromolecular NMR**

Course ID: 136204

Faculty:

Next Term Offered: 2016 Fall

Theory and practice of modern methods of macromolecular structure determination using multi-dimensional NMR.

**BCMP 307QC Approaches to Drug Action, Discovery, and Design**

Course ID: 127643

Faculty:

Next Term Offered: 2017 Spring

Application of molecular, systems, and structural biology, genetics, genomics, enzymology, and chemistry to development of new therapies. Examples drawn from diseases including cancer and AIDS. Students write and present proposals for discovery of new therapeutics.

**BCMP 309QC Principles of Drug Action in Man**

Course ID: 109227

Faculty:

Next Term Offered: 2017 Spring

This course pairs with BCMP 307qc. Approaches to Drug Action, Discovery, and Design.

**CELLBIO 212 Biology of the Cancer Cell**

Course ID: 125825

Faculty:

Next Term Offered: 2017 Spring

This semester long course takes a molecular approach to examine the basis of human cancer. The main concepts that we will cover include: tumor suppressor genes and oncogenes, signal transduction, DNA damage and repair, angiogenesis, metastasis and invasion, and apoptosis. Lectures will be delivered by experts in the various fields of Cancer Biology research to provide an integrated perspective on past, current and future approaches in Cancer Biology Research.

**CELLBIO 309QC Advanced Topics in Cell Biology**

Course ID: 109331

Faculty:

Next Term Offered: 2016 Fall

Dinner Seminar Theme: Controlling Cellular Behavior and Metabolism through Cell Interaction and Signaling. Review articles assigned each week to prepare students for discussion.

## **HBTM 302QC Imaging and Microscopy Methods in Biology and Medicine**

Course ID: 107418

Faculty:

Next Term Offered: 2016 Fall

Introduce modern imaging modalities with emphasis on modalities frequently employed in cellular, molecular biology and medicine. Overview of noninvasive medical imaging techniques frequently used in scientific research: X-ray CT, MRI, ultrasound, PET/SPECT and optical imaging.

## **NEUROBIO 309QC The Molecular Pathology and Current Therapies for Retinal Diseases**

Course ID: 109255

Faculty:

Next Term Offered: 2016 Fall

Retinal diseases are major causes of irreversible blindness. A surge of progress resulting from studies in the disease mechanisms and the development of new imaging technology have led to a huge step forward in the therapies for diagnosing and treating retinal diseases and preventing blindness. This course will offer students an in-depth examination of current knowledge regarding retinal diseases, molecular pathology, and therapy, with an emphasis on recent breakthroughs and discussion of key studies in the field. The class consists of lectures and group discussions that focus on seminal papers selected from both the basic science and clinical ophthalmology, which will serve as a basis for teaching students basic concepts of ophthalmology and becoming familiar with animal models of retinal diseases. Each session will review the landmark publications on a particular topic or disease. As the retina has long served a standard model for studying the CNS, the class will foster discussion on the implications of these studies in other disease mechanisms and therapy.

## **NEUROBIO 310QC Careers in Neuroscience**

Course ID: 160779

Faculty:

Next Term Offered: 2017 Spring

This course provides graduate students in the Program in Neuroscience with early exposure to the opportunities and challenges associated with a variety of rewarding careers in the field of neuroscience, as well essential steps along the path towards those careers. Academic career topics will include postdoctoral training, obtaining and starting independent faculty positions, grant writing and reviewing, and opportunities for research and teaching positions. Other topics will include career opportunities in biotechnology, the pharmaceutical industry, patent law, journal editing/science writing, science policy, and consulting. One main topic will be covered at each class meeting, and one or more invited discussion leaders with expertise in the topic will participate in the class. Discussion leaders will include Harvard faculty members as well as outside experts.

## Mind, Brain, and Behavior

### **MBB 980B Addiction, Choice, and Motivation**

Course ID: 124115

Faculty:

Next Term Offered: 2016 Fall

Seeks a comprehensive understanding of addiction and why it has been such a contentious topic. Readings and discussion address (1) the characteristics of addiction as revealed in biographies, epidemiological studies, clinical research, experiments, and historical "natural experiments"; (2) how drugs work; (3) the functional significance of drug-induced neural changes; (4) genetic influences on alcohol use in the context of gene expression (4) a behavioral economic analysis of impulsivity and addiction.

### **MBB 980C The Science of Happiness**

Course ID: 124116

Faculty:

Next Term Offered: 2017 Spring

Focuses on the science of happiness, integrating findings from positive psychology, psychiatry, behavioral genetics, neuroscience, and behavioral economics. Begins with a brief history of ideas on happiness from Aristotle to Kahneman. Considers the genetics of happiness including the notion of a biologically determined hedonic set point, the brain's pleasure circuitry, and the mind's power to frame events positively, a tool used in cognitive therapies. Questions whether pleasure and happiness are our purpose.

### **MBB 980IR Topics in the Mind/Brain Sciences: How the Mind/Brain Represents the World**

Course ID: 109869

Faculty:

Next Term Offered: 2016 Fall

Many questions in the contemporary cognitive sciences seem to benefit from a multi-disciplinary approach, and require a converging multi-layered explanation. MBB faculty in neurobiology, psychology, and philosophy explore topics that can be examined by research methods of the respective fields of study, presenting and discussing common questions from multiple perspectives. Ultimate goals are to (1) give a genuine sense of the difficult but rewarding nature of interdisciplinary work and (2) make progress on difficult questions in the mind-brain sciences through such collaboration. This year, seminar attempts to understand how the mind and brain represent the world.

### **MBB 980J Avian Cognition: Why Being Called a Bird Brain Is a Compliment**

Course ID: 108875

Faculty:

Next Term Offered: 2016 Spring

Humans have a long, conflicting history judging nonhuman cognitive abilities, particularly for

nonprimate species. We anticipate and accept communicative and cognitive capacities resembling our own in great apes and cetaceans, but not in birds. Controlled experimental studies have, however, documented impressive avian cognitive traits. This course explores classic and new findings in avian cognition to demonstrate that birds, despite brain architectures lacking much human-like cortical structure and evolutionary histories differing so greatly from ours, equal and sometimes surpass us on various cognitive tasks.

## Molecular and Cellular Biology

### **MCB 121 The Microbes**

Course ID: 127813

Faculty: Karine Gibbs

Next Term Offered: 2016 Fall

This general microbiology course will focus on the genetics, cell biology, and physiology of microorganisms. The goal of this course is to give the students a broad overview of microbial physiology in the context of disease and environmental applications. The course will primarily consist of lectures with problem sets; we will also incorporate current and classical literature.

### **MCB 131 Computational Neuroscience**

Course ID: 117859

Faculty: Haim Sompolinsky

Next Term Offered: 2017 Spring

Follows trends in modern brain theory, focusing on local neuronal circuits as basic computational modules. Explores the relation between network architecture, dynamics, and function. Introduces tools from information theory, statistical inference, and the learning theory for the study of experience-dependent neural codes. Specific topics: computational principles of early sensory systems; adaptation and gain control in vision, dynamics of recurrent networks; feature selectivity in cortical circuits; memory; learning and synaptic plasticity; noise and chaos in neuronal systems.

### **MCB 135 Introductory Systems Biology**

Course ID: 156247

Faculty:

Next Term Offered: 2017 Spring

How are biological patterns like spots and stripes generated? How do cells keep time? How do viral capsids self-assemble? In this course, these questions and many others are addressed through the lens of systems biology, an interdisciplinary field which explores general principles underlying complex biological phenomena. Key scientific skills like primary literature review, experimental design, and data interpretation will be introduced through weekly discussion sections and problem sets. Students from other disciplines are welcome.

### **MCB 141 Molecular and Cellular Biology of the Senses and their Disorders**

Course ID: 115382

Faculty: Catherine Dulac

Next Term Offered: 2017 Spring

"The great art of life is sensation, to feel that we exist, even in pain." Lord Byron. Molecular basis of normal and pathological sensory perception, formation and modulation of sensory circuits during development and in the adult brain. Topics will include the mechanisms of sensory detection and discrimination, the discovery of key genes, cellular pathways and neural circuits affected in human disorders, molecular and genetic strategies for restoring normal sensation, coding of sensory

information by the brain, establishment of appropriate connections in the developing brain, epigenetic influences on sensory function. Molecular, genetic and epigenetic approaches to normal and pathological sensing and associated behavior will be discussed.

### **MCB 144 The Power and Pitfalls of Genetical Thinking**

Course ID: 108127

Faculty: Nancy Kleckner

Next Term Offered: 2017 Spring

An advanced treatment of heredity, including genetic, epigenetic and evolutionary aspects, as manifested in organisms from bacteria to man. Emphasis will be placed on how analytical genetic thinking and approaches can be applied to fundamental biological questions. Course format will include lectures, reading of the primary literature, student group projects and a final paper. Suitable for students in either the physical or biological sciences.

### **MCB 146 Experience-Based Brain Development: Causes and Consequences**

Course ID: 123272

Faculty: Takao Hensch

Next Term Offered: 2017 Spring

At no time in life does the surrounding environment so potently shape brain function as in infancy and early childhood. This course integrates molecular/cellular biology with systems neuroscience to explore biological mechanisms underlying critical periods in brain development. Understanding how neuronal circuits are sculpted by experience will motivate further consideration of the social impact on therapy, education, policy, and ethics.

### **MCB 154 Advanced Cell and Developmental Biology**

Course ID: 127008

Faculty: Susan Mango

Next Term Offered: 2017 Spring

This course will survey primary research papers describing topics in molecular and cellular biology. We will focus on areas of disagreement, reading pairs of papers that come to antithetical conclusions. Which is correct? Can both points of view be right? What experiments or controls would bolster the hypotheses of one or the other paper? Topics will focus on seminal findings in cell and developmental biology. Each week a different area will be covered through a combination of paper discussions, an introductory lecture and a quiz.

### **MCB 157 Developmental Genetics and Genomics**

Course ID: 108338

Faculty: Craig Hunter

Next Term Offered: 2016 Fall

Our goal is for students to gain a fundamental understanding of the genetic control of development

in four genetically accessible animal models; the nematode *C. elegans*, the fruit fly *Drosophila melanogaster*, the zebra fish *Danio rio*, and the mouse *Mus musculus*. A focus of the course is to compare and contrast genetic analysis of and the genetic control of developmental processes and mechanisms in these four organisms. The course consists of lectures, student presentations, and written assignments.

### **MCB 198 Advanced Mathematical Techniques for Modern Biology**

Course ID: 127011

Faculty: Sharad Ramanathan

Next Term Offered: 2017 Spring

How do we find biologically meaningful patterns in a large amount of data? How do animals learn to use patterns in the environment to infer information despite the ignorance of the underlying laws? The course will introduce Bayesian analysis, maximum entropy principles, hidden markov models and pattern theory in order to study DNA sequence, gene expression and neural spike train data. The relevant biological background will be covered in depth.

### **MCB 199 Statistical Thermodynamics and Quantitative Biology**

Course ID: 122410

Faculty: David Nelson

Next Term Offered: 2017 Spring

Course seeks to develop an understanding of thermodynamics and statistical mechanics, with applications to quantitative problems in biology such as configurations of biopolymers, equilibrium states of matter, chemical reactions and protein transport, using the concepts of entropy, free energy, adsorption, chemical kinetics and molecular diffusion.

### **MCB 208 Talking about Science**

Course ID: 121320

Faculty: Jeff W. Lichtman

Next Term Offered: 2016 Fall

Teaches advanced students how to give a good research talk while exposing them to seminal scientific discoveries. Emphasis will be on speaking style, lecture organization, and use of video projection tools.

## Music

### **MUSIC 103R Masterwork: The Choreographic Process of William Forsythe**

Course ID: 107436

Faculty:

Next Term Offered: 2017 Spring

A comprehensive study of a William Forsythe work with one of his closest collaborators. Students will watch rare rehearsal and performance footage, and examine all aspects of the choreographic process from the first movement sketches to compositional modalities, lighting, music, and dramaturgical design. A unique, rigorous and interdisciplinary course of study which will include a collaborative process to create an original dance work for performance, and expose students to all aspects of a master work by a preeminent American dance innovator.

### **MUSIC 128R Workshop on Opera**

Course ID: 127152

Faculty: Federico Cortese

Next Term Offered: 2016 Fall

### **MUSIC 193RCA Topics in Music from 1800 - Present**

Course ID: 122664

Faculty:

Next Term Offered: 2017 Spring

*19th Century Opera.* The nineteenth-century saw a revolution in the aesthetics and cultural politics of opera. We will look at a series of works from Rossini to Debussy, with attention to libretti and their relationship to literature, musical design, and orchestration. In addition, we'll be considering present-day stagings of classic nineteenth-century works, especially those of Verdi and Wagner, and stage directors' interpretive interventions.

### **MUSIC 193RCO American Musical Theater**

Course ID: 109998

Faculty:

Next Term Offered: 2017 Spring

### **MUSIC 212R Chant: Seminar**

Course ID: 114767

Faculty: Thomas F. Kelly

Next Term Offered: 2016 Fall

*Chant.* Transcribing the Beneventan Chant. In preparation for a new edition, the seminar will consider the sources and the music of one of the earliest repertoires of Western music, native to southern Italy.

**MUSIC 218R 20th-Century Music: Seminar**

Course ID: 117766

Faculty:

Next Term Offered: 2016 Fall

*Music of the Last 10 Years.* The seminar will focus on selected recent works (from the U.S. and Europe) reflecting a wide variety of aesthetic positions. We will explore Boston's dynamic new music scene, attending concerts and inviting visiting composers and performers to class.

## Near Eastern Languages and Civilizations

### **AKKAD 144 Akkadian Divination Texts**

Course ID: 107741

Faculty: Piotr Steinkeller

Next Term Offered: 2016 Fall

### **AKKAD 149 Akkadian Legal and Economic Texts**

Course ID: 119085

Faculty:

Next Term Offered: 2016 Fall

### **AKKAD 150 Working with Original Cuneiform Documents**

Course ID: 119472

Faculty: Piotr Steinkeller

Next Term Offered: 2018 Spring

An introduction to the reading and copying of cuneiform tablets. As part of the class, students will have an opportunity to study a wide range of tablets from the Harvard Semitic Museum collection, dating from the Pre-Sargonic through the Seleucid period. The course will also provide general information on the history of cuneiform script, tablet types and shapes, organization of script on various types of documents, and sealing practices.

### **AKKAD 153 Old Akkadian**

Course ID: 123459

Faculty: Piotr Steinkeller

Next Term Offered: 2016 Fall

Readings in representative historical, epistolary, literary, and economic texts with emphasis on the grammar.

### **AKKAD 154A Peripheral Akkadian**

Course ID: 111624

Faculty: Piotr Steinkeller

Next Term Offered: 2017 Fall

### **AKKAD 157 Introduction to Old Assyrian Language and History**

Course ID: 110013  
Faculty: Gojko Barjamovic  
Next Term Offered: 2016 Fall

Readings of texts in the Assyrian dialect of the period c. 1920-1720 BCE. Examples include loans and quittances, caravan texts, commercial records, partnership contracts, business letters, family and state law, political treaties, royal inscriptions, incantations and literature. The course will integrate the textual record with an overview of Anatolian history and material culture during the period in question.

### **AKKAD 200R Readings in Akkadian: Seminar**

Course ID: 112102  
Faculty: Piotr Steinkeller  
Next Term Offered: 2017 Spring

### **ANE 100 History of the Ancient Near East**

Course ID: 120250  
Faculty: Gojko Barjamovic  
Next Term Offered: 2016 Fall

This course provides an overview of the history of the ancient Near East, with a focus on ancient Mesopotamia. It begins with the advent of writing in the late fourth millennium BCE and ends with the fall of Babylon to Cyrus the Great, in 539 BCE. The course combines archaeological, art historical, and textual data to explore the extraordinarily rich history of this region.

### **ANE 102 Introduction to Mesopotamian Religion**

Course ID: 114298  
Faculty: Piotr Steinkeller  
Next Term Offered: 2018 Spring

A survey of the history and major concerns of ancient Mesopotamian religion from prehistoric times down to the reign of Alexander the Great. Among the topics treated are the key figures of the Sumero-Babylonian pantheon, the major mythological compositions (read in translation), personal religion, cosmogonies and theogonies, magic and divination, Mesopotamian temples, and cult and ritual. The course makes rich use of ancient iconography.

### **ANE 134 Genesis: Narrative Artistry and Theological Meanings**

Course ID: 112855  
Faculty: Jon Levenson  
Next Term Offered: 2017 Fall

A close critical reading in English of the book of Genesis with an eye both to the storytellers'

techniques and to the moral and theological dimensions of the text. Emphasis will be given to literary and religious rather than historical and editorial issues.

**ANE 155R Ancient Mesopotamia: Archaeology and Texts**

Course ID: 127956

Faculty: Piotr Steinkeller

Next Term Offered: 2017 Spring

Ancient Mesopotamia was the world's first literate urban civilization. This class will examine the origins and evolution of cities, temples, and government from two complementary perspectives: the archaeological record and cuneiform inscriptions in translation. Activities will include visits to museum collections (Peabody, Semitic Museum, Boston MFA), hands-on experience with creating cuneiform tablets, and virtual tours of southern Iraq using satellite imagery.

**ANE 210 Textual Criticism of the Hebrew Bible: Seminar**

Course ID: 114445

Faculty: Richard Saley

Next Term Offered: 2016 Fall

This course focuses on the art of recovering the text of the Hebrew Bible using Hebrew and Greek manuscripts as well as other early textual witnesses.

**ARABIC 133 Upper-Level Spoken Modern Standard Arabic**

Course ID: 120366

Faculty: William Granara

Next Term Offered: 2017 Fall

This course emphasizes the development of advanced speaking and listening skills by exposing students to the contemporary media and academia. Some reading and writing will be required, but classes will revolve around oral presentations and directed conversations.

**ARABIC 134 Colloquial Levantine Arabic**

Course ID: 121973

Faculty: Nour Barmada

Next Term Offered: 2017 Spring

Introduces students to Colloquial Levantine Arabic of Lebanon, Syria, Jordan, and Israel/Palestine. The course emphasizes the development of speaking and listening skills through the reinforcement of grammar and vocabulary.

**ARABIC 243BR Advanced Readings in Classical Arabic Bridge II: Rational Sciences**

Course ID: 109802

Faculty: Khaled El-Rouayheb

Next Term Offered: 2017 Spring

Reinforcement of advanced classical Arabic grammar and stylistics, and introduction to the genres of *usul*, *kalam*, *mantiq* and *falsafa*.

**ARABIC 243CR Advanced Readings in Classical Arabic Bridge III: Prose and Poetry**

Course ID: 109803

Faculty: William Granara

Next Term Offered: 2016 Fall

Reinforcement of advanced classical Arabic grammar and stylistics, and introduction to various genres of poetry and prose (*adab*).

**ARABIC 249R Arabic Philosophical Texts: Seminar**

Course ID: 113215

Faculty: Khaled El-Rouayheb

Next Term Offered: 2018 Fall

Readings on selected topics in Islamic philosophy.

**ARABIC 250R Islamic Theological Texts: Seminar**

Course ID: 122571

Faculty: Khaled El-Rouayheb

Next Term Offered: 2018 Spring

Readings on selected topics in Islamic theology.

**ARMEN 120 Armenian Magical Texts**

Course ID: 124288

Faculty: James Russell

Next Term Offered: 2018 Spring

Armenian magical texts include codices, scrolls, and separately-printed saints' lives used for good or ill, containing magic squares and symbols, the latter mostly deriving from Islamic magic. The course will consider literary sources of magic texts (e.g., the prayer *Havatov khostovanim*, the meditations of Narek), parallel traditions (esp. Christian Ethiopia), and the consideration of the paintings in Armenian magical manuscripts from the standpoint of the genre of Outsider Art.

**ARMEN 130 Advanced Classical Armenian**

Course ID: 114443

Faculty: James Russell

Next Term Offered: 2017 Fall

The text of St. Grigor Narekats'i *Matean olbergut'ean*, with other mystical texts from Armenian and Eastern Christian traditions.

**ARMENST 100 Armenian Epic**

Course ID: 111769

Faculty: James Russell

Next Term Offered: 2018 Spring

Reading in translation of *The Wild Men of Sasun*, with analysis of native historical and mythological sources, and thematic comparison to epic poetry of the neighboring Iranians (Ossetic *Narts*, Persian *Shah-nameh*, Kurdish epic songs), Turks (*Dede Korkut*), and Greeks (*Digenes Akrites*).

**ARMENST 102 Introduction to Armenian Civilization**

Course ID: 126872

Faculty: James Russell

Next Term Offered: 2017 Fall

A survey of the history and culture of the Armenian people from earliest times to the Genocide and Soviet era.

**ARMENST 105 Survey of 19th and 20th Century Armenian Poetry: From Romantics to Revolutionaries**

Course ID: 119800

Faculty: James Russell

Next Term Offered: 2017 Fall

A survey of the great innovators and visionaries: Bedros Tourian, Misak Medzarents, Yeghia Demirjibashian, Daniel Varouzhan, Siamanto, Vahan Teryan, Yeghishe Charents, and their English, Russian, and French colleagues and translators. The course spans the fateful epoch from the mid-19th century to the aftermath of the Russian Revolution.

**EGYPTIAN AA The Language of the Pharaohs: Introduction to Egyptian Hieroglyphs I**

Course ID: 126691

Faculty: Peter Der Manuelian

Next Term Offered: 2017 Fall

This language course explores the fundamentals of Middle Egyptian, the classical stage of Egyptian hieroglyphs used throughout much of ancient Egyptian history. Lessons in the Egyptian writing system, grammar, and culture, with weekly vocabulary and exercises, will introduce the language and verbal system in a systematic fashion. By the end of the semester, students may begin to read selections from Egyptian classic stories and historical texts. Visits to the Semitic Museum and the Museum of Fine Arts, Boston, in order to read ancient hieroglyphic inscriptions on the original monuments, may also be included.

**EGYPTIAN AB The Language of the Pharaohs: Introduction to Egyptian Hieroglyphs II**

Course ID: 126692

Faculty: Peter Der Manuelian

Next Term Offered: 2018 Spring

Continues Middle Egyptian I from the spring 2013 semester. Students will complete the introductory grammar book lessons, and move on to read a selection of basic stories, historical and biographical inscriptions, in the original hieroglyphs. Visits to the Egyptian galleries of the Museum of Fine Arts, Boston, in order to read some of the ancient hieroglyphic inscriptions on the original monuments, may also be included.

**EGYPTIAN 150 Voices from the Nile: Ancient Egyptian Literature in Translation**

Course ID: 127917

Faculty: Peter Der Manuelian

Next Term Offered: 2018 Spring

Examines several literary genres, from the Pyramid Age through at least the New Kingdom (ca. 2500-1000 BCE), including royal decrees, autobiographies, the Pyramid Texts, legal documents, letters to the living (and dead), love stories and poetry, military texts, religious rituals, and tomb robber court trial transcripts. Special emphasis on classical tales of the Middle Kingdom ("The Shipwrecked Sailor," "The Story of Sinuhe," etc.). Lectures, class discussion; no prerequisites.

**HEBREW 235 The Binding of Isaac (Aqedah): Seminar**

Course ID: 120896

Faculty: Jon Levenson

Next Term Offered: 2017 Spring

An examination of Genesis 22 and its afterlife in ancient Judaism, early Christianity, and the Qur'an. Ample consideration of the interpretation and expansion of the story in modern theology and of critical responses to the story.

**HEBREW 236 Song at the Sea: Seminar**

Course ID: 120897

Faculty: Jon Levenson

Next Term Offered: 2016 Fall

A close reading of Exodus 13:17-15:21 in the context of the Hebrew Bible together with its ancient Near Eastern background. Ample Hebrew readings in this block of material and parallel biblical texts.

**HEBREW 238 Readings in Midrash: Seminar**

Course ID: 109532

Faculty: Jon Levenson  
Next Term Offered: 2016 Fall

Close reading in Hebrew of selections from the *Mekhilta de-Rabbi Ishmael* with the goal of understanding the nature of biblical interpretation in rabbinic Judaism and the shape of rabbinic theology.

**HEBREW 239 Exodus 2 in Three Contexts: Seminar**

Course ID: 156094

Faculty: Jon Levenson

Next Term Offered: 2017 Spring

A close critical reading of the account of the early life of Moses in three contexts: (1) the Hebrew Bible and the ancient Near Eastern world in which it took shape; (2) rabbinic Judaism in Late Antiquity; and (3) medieval Jewish commentary. Texts to be read in Hebrew include Exodus 2 and a selection of rabbinic midrashim and medieval commentaries on it.

**IRANIAN BA Introduction to Western Middle Iranian**

Course ID: 112952

Faculty: James Russell

Next Term Offered: 2017 Fall

An introduction to the pre-Islamic languages and literatures of Parthian and Sasanian Iran and Zoroastrian sacred texts, and their alphabets. This is an indivisible course. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

**IRANIAN 215 Intermediate Western Middle Iranian**

Course ID: 156056

Faculty: James Russell

Next Term Offered: 2017 Fall

Further study of the pre-Islamic languages and literatures of Parthian and Sasanian Iran and Zoroastrian sacred texts, and their alphabets.

**ISLAMCIV 145A Introduction to Islamic Philosophy and Theology: Formative and Classical Periods (8th to 17th C.)**

Course ID: 121928

Faculty: Khaled El-Rouayheb

Next Term Offered: 2016 Fall

An introductory survey of the development of Islamic theology and philosophy. We will examine and discuss some of the central problems that were much debated through the centuries, such as: the relationship between philosophy and faith; whether humans possess free will; how to understand apparently anthropomorphic expressions in Scripture; whether acts are good because

God commands them or God commands them because they are good; and proofs for the existence of God.

### **ISLAMCIV 145B Introduction to Islamic Philosophy and Theology: The Modern Period (19th and 20th centuries)**

Course ID: 109521

Faculty: Khaled El-Rouayheb

Next Term Offered: 2017 Spring

The course is a continuation of Islamic Civilizations 145a but may be taken independently. It explores the thought of some of the major Islamic philosophers and theologians in the 19th and 20th centuries: Muhammad Abduh, Muhammad Iqbal, Said Nursi, Abu I-Ala Maududi, Sayyid Qutb, Ali Shariati, Murtaza Mutahheri and Mohammed Arkoun.

### **ISLAMCIV 146 al-Ghazali: Theologian and Mystic**

Course ID: 123196

Faculty: Khaled El-Rouayheb

Next Term Offered: 2018 Fall

Al-Ghazali (d.1111) is generally recognized to be one of the most influential of all Muslim religious thinkers. A prominent theologian and jurist, he experienced a spiritual crisis at the height of his career, and as a consequence explored mysticism (Sufism) and worked out a powerful synthesis between respect for the externals of the Islamic religion and the mystics' stress on the interior life. In this course, we will look in particular at his account of his spiritual crisis; his critical engagement with the Islamic Philosophers; and some of the more mystical works that he wrote toward the end of his life, including his theodicy, his meditations on the Qur'anic dictum that "God is the Light of the Heavens and the Earth", and select chapters from his great summa "The Revival of the Religious Sciences". All readings will be in English.

### **ISLAMCIV 171 Religion and Political Violence in North Africa and the Sahel**

Course ID: 156347

Faculty:

Next Term Offered: 2016 Fall

Unknown in Africa before the jihad against the Soviet Occupation of Afghanistan, suicide bombing has become common place in the 21st century. From Algeria to Somalia through Libya, Mali and Nigeria, so-called Salafi jihadis have recruited and trained tens of thousands of combatants. Through cigarette and narcotic trafficking, hostage taking for ransom, and bank hold ups, they have procured huge financial resources, sophisticated weapons, and now constitute a serious security challenge not only to many countries of North Africa and the Sahel but also to their Western allies. This conference course will address the spread of jihadi groups in Muslim Africa (North Africa and the Sahel) after the cold war. The first part of the course will address the divergent theoretical interpretations of terrorism and address in particular the following questions: Is it greed that sustains civil wars or grievance? Does the root of terror lie in culture or politics? Is there any evidence that civilizations clashed after the cold war? The second part of the course will focus on

select transnational Islamist movements, situated both in their local context of nation building and their larger regional contexts. Case studies will include Al-Qaida in the Islamic Maghreb in North Africa and the Sahel, the Harakat al-shabab al-mujahidin in the Horn of Africa, the Boko Haram in the Lake Chad region and the Gama'at islamiyya in Egypt and beyond.

### **ISLAMCIV 172 Knowledge and Authority in Muslim Societies**

Course ID: 156348

Faculty:

Next Term Offered: 2017 Spring

This seminar will investigate the ways in which the production of knowledge affects the construction of authority in the Islamic world. It will look at how various forms of religious knowledge are acquired, legitimated, transmitted and/or contested within Muslim communities. Several types of knowledge will be: exoteric knowledge based on the Koran and other Islamic sciences, mystical knowledge as developed by the Sufis, and talismanic knowledge. Ulama trained in the exoteric sciences derived their authority from the conventional knowledge of the Koran, and religious sciences. Sufi masters derived theirs from their purported ability to explain the hidden meanings of the Koran, to provide spiritual training and guide the disciple in the path toward spiritual fulfillment. Finally, the credibility of talisman makers rested largely on their ability to use religious texts for purposes such as healing and bringing luck. Of course, the boundaries between these figures of authority are not rigid and some of them may engage in the activities of the other. The first part of the seminar will focus on pre-colonial Muslim societies and the second part on the impact of Western hegemony on the transmission of knowledge and construction of authority in the postcolonial Islamic world. Seminar participants will compare and contrast historical and contemporary experiences of transmission of knowledge and production of authority in various parts of the World of Islam and investigate the historical linkages between these regions.

### **ISLAMCIV 175 Islam in African History**

Course ID: 109242

Faculty:

Next Term Offered: 2017 Spring

As of 2009 according to the Pew Charitable Trust Survey of the Global Muslim population, 241 million Muslims lived south of the Sahara. This is about 15 percent of the Muslim global population. The course is designed to provide an understanding of the spread of Islam and the formation and transformation of Muslim societies in Sub-Saharan Africa. The course is organized in two parts. The first part of the course will focus on the history of Islamization of Africa, and topics will include the ways in which Islam came to Africa, the relationships of Islam to trade, the growth of literacy in Arabic and Ajami, the rise of clerical classes and their contribution to State formation in the pre-colonial period. The second part of the course will address Muslim responses to European colonial domination, and the varieties of Islamic expressions in the post-independence period (rise of Islamist, Shiite and Salafi jihadi movements) and Muslim globalization. In addition to the lectures, the course will include film showing, and two discussion sections: one in English and one in Arabic.

### **ISLAMCIV 214 Concepts of Innovation (Tajdid) in Classical Islam (9th-12th Centuries)**

Course ID: 156315  
Faculty: Baber Johansen  
Next Term Offered: 2017 Spring

In the secondary literature Muslim law and theology of the Middle Period of Islam are widely characterized as tradition-bound and oriented towards the past. Such an assessment can, in fact, be justified through references to many of the texts of both disciplines. But it ignores that important jurists and theologians in 11th- and 12th century Baghdad and elsewhere adopted a different approach to the tasks of their disciplines, seeing innovation (*tajdīd*) as the characteristic of Muslim culture, law, and theology. In this seminar we will read (in Arabic or in the translations by BJ) philosophical, legal, and philological texts that define language, law, social and cultural practices as continuing processes of innovation. The philological debate on the divine or human "Instituting of language" (*waḍʿ al-luġha*) that was led from the 9th to the 16th century served as a general point of reference for these debates. It will also be the starting point of our discussions. This discussion has to be related to the translation movement that - from the 8th to the 10th century - helped to integrate natural sciences and philosophy into Islamic culture and religion. We will read Dimitri Gutas' history of this translation movement. In the second half of the seminar, we will focus on the fields to which scholars of the eleventh and twelfth centuries apply their concept of innovation and the way in which the scholarly and political milieu reacted to this conceptualization.

### **JEWISHST 200R Guided Readings in Jewish History**

Course ID: 113948  
Faculty: Shaye J.D. Cohen  
Next Term Offered: 2016 Fall

Topic for 2010-11: Boundaries and Identities. Readings of Jewish texts, ancient to modern, that deal with the question of the Other and the Self: what is the boundary between Jews and non-Jews, and between Judaism and non-Judaism? Topic for 2014-15 to be determined.

### **MODMDEST 111 Culture and Society in Contemporary Iran**

Course ID: 107810  
Faculty:  
Next Term Offered: 2018 Spring

Introduces a wide spectrum of students to some of the most significant aspects of Iranian culture from the Constitutional Revolution through the three decades since the Islamic Revolution of 1979, one of the paradigmatic shifts in twentieth-century global history. Using the modernist commitment of artists and intellectuals to social and political engagement as a unifying theme, the course will survey modern and contemporary Iranian culture through the analysis of various literary, artistic, cinematic, and intellectual forms. The impact of European culture; nationalism; the tensions between modernism, secularism, and religion; the emergence of women's voices, a cinematic avant-garde, and mass culture; the strains of cosmopolitan and provincial coexistence; the anti-Western critique of "occidentosis"; and the controversial 2009 elections are among the issues that will be addressed.

**MODMDEST 158B Modern Arabic Literature Seminar: Lebanese Civil War: Histories and Fictions**

Course ID: 121372

Faculty: William Granara

Next Term Offered: 2018 Spring

Examines the roots and issues of the Lebanese Civil War (1975-90) and its continuing impact on modern Arabic fiction. The syllabus pairs realistic and romanticized representations of family, sectarianism, and gender binaries against the destruction and fantasy of the urban landscape. Themes include nostalgia and memory, exile and return. Films and documentaries will also be viewed.

**MODMDEST 160R History of Modern Turkey through Literature**

Course ID: 120115

Faculty: Himmet Taskomur

Next Term Offered: 2017 Spring

This course surveys the history of modern Turkey and culture through Turkish literature in translation. Main focus is on topics of cultural revolution, nationalism, identity, gender, and migration. Primary readings are translations of novels, short stories, drama and poetry.

**MODMDEST 175R Understanding Modern North Africa**

Course ID: 127557

Faculty: William Granara

Next Term Offered: 2017 Spring

An introduction to the history, politics, cultures, societies and economics of the modern Maghrib (Morocco, Algeria, Tunisia and Libya). Emphasis on the formation of evolving post-colonial identities within Islamic, Arabo-Berber, African, and Mediterranean contexts.

**PERSIAN 152 Literary and Visual Narrative in the Persian Epic Tradition**

Course ID: 107672

Faculty:

Next Term Offered: 2017 Fall

Both poetry and the art of painting in medieval Persianate cultures developed to a high level of artistic excellence in the context of court patronage. This course examines that development through the epic tradition in medieval Persian poetry and prose including long narratives in heroic, romance, folk and ethical genres. The course considers the affinities and differences between these and epic tales from other traditions as well as their interactions with Persian painting and manuscript illustration. Beginning with the Parthian romance of *Vis and Ramin* and the heroic epic of *Shahnameh*, the survey will continue with epic romances of Nizami, prose narratives about folk heroes such as *Abu Muslimnameh*, and didactic epics by Sa`di and others.

**SUMERIAN 140 Sumerian Historical Texts**

Course ID: 112090

Faculty: Piotr Steinkeller

Next Term Offered: 2016 Fall

**SUMERIAN 141 Sumerian Myths and Epics**

Course ID: 113378

Faculty: Piotr Steinkeller

Next Term Offered: 2017 Spring

**SUMERIAN 145 Sumerian Incantations and Rituals**

Course ID: 148063

Faculty: Piotr Steinkeller

Next Term Offered: 2016 Fall

**SUMERIAN 146 Sumerian Religious Literature**

Course ID: 111793

Faculty:

Next Term Offered: 2016 Fall

**SUMERIAN 149 Sumerian Legal and Economic Texts**

Course ID: 124398

Faculty:

Next Term Offered: 2018 Spring

**SUMERIAN 200R Readings in Sumerian: Seminar**

Course ID: 121504

Faculty:

Next Term Offered: 2017 Spring

**SUMERIAN 300 Sumerian Language and Literature**

Course ID: 122713

Faculty: Piotr Steinkeller

Next Term Offered: 2016 Fall

**TURKISH AA Elementary Modern Turkish**

Course ID: 111729

Faculty: William Granara

Next Term Offered: 2016 Fall

Emphasis on all aspects of Turkish grammar toward developing a solid foundation for speaking, listening, reading, writing, and vocabulary skills. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

**TURKISH AB Elementary Modern Turkish**

Course ID: 159868

Faculty: William Granara

Next Term Offered: 2017 Spring

Emphasis on all aspects of Turkish grammar toward developing a solid foundation for speaking, listening, reading, writing, and vocabulary skills. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

**TURKISH 140A Introduction to Ottoman Turkish I**

Course ID: 118284

Faculty: William Granara

Next Term Offered: 2016 Fall

Introduction to basic orthographic conventions and grammatical characteristics of Ottoman Turkish through readings in printed selections from the 19th and 20th centuries, and exercises on techniques.

**TURKISH 140B Introduction to Ottoman Turkish II**

Course ID: 118285

Faculty: William Granara

Next Term Offered: 2017 Spring

Continuation of Turkish 140a. Exercises on specialized orthographic conventions and grammatical characteristics of Ottoman Turkish through readings in printed selections from the 19th and 20th centuries.



## Neurobiology

### **NEUROBIO 102A Designer Neurons: How Cell Types are Generated in the Nervous System and the Lab**

Course ID: 108068

Faculty:

Next Term Offered: 2016 Fall

The derivation of stem cells from a human embryo ten years ago ignited an explosion of scientific and public interest. This seminar will explore the current understanding of neural stem cells as it relates to their role in physiological and pathological states in developing and adult animals. We will also explore the generation, characterization, and manipulation of neural stem cells in current research.

### **NEUROBIO 102B Designer Neurons: How Cell Types are Generated in the Nervous System and the Lab**

Course ID: 159696

Faculty:

Next Term Offered: 2017 Spring

The derivation of stem cells from a human embryo ten years ago ignited an explosion of scientific and public interest. This seminar will explore the current understanding of neural stem cells as it relates to their role in physiological and pathological states in developing and adult animals. We will also explore the generation, characterization, and manipulation of neural stem cells in current research. This is the second half of a full year course.

### **NEUROBIO 103A Building a Brain**

Course ID: 127226

Faculty:

Next Term Offered: 2016 Fall

Neuronal connectivity underlies brain function. This seminar focuses on discussing and debating research related to how synaptic connections are influenced by genes, the environment, and chance to generate functional circuits and accommodate learning. In particular we will discuss molecular mechanisms, activity patterns (spontaneous and experience-evoked), and organizational rules implicated in synaptic formation and refinement in the context of many regions within the nervous system (retina, olfactory bulb, cortex, autonomic, and neuromuscular system).

### **NEUROBIO 103B Building a Brain**

Course ID: 159697

Faculty:

Next Term Offered: 2017 Spring

Neuronal connectivity underlies brain function. This seminar focuses on discussing and debating research related to how synaptic connections are influenced by genes, the environment, and chance to generate functional circuits and accommodate learning. In particular we will discuss

molecular mechanisms, activity patterns (spontaneous and experience-evoked), and organizational rules implicated in synaptic formation and refinement in the context of many regions within the nervous system (retina, olfactory bulb, cortex, autonomic, and neuromuscular system). This is the second half of a full year course.

## Organismic and Evolutionary Biology

### OEB 145 **Genes and Behavior**

Course ID: 145857

Faculty: Yun Zhang

Next Term Offered: 2016 Fall

Behavior is inheritable and regulated by genes. This lecture course explores the causal links between the genes encoded in the genome and various behaviors, aiming to provide mechanistic understandings on how gene products control and influence behavioral outputs. The topics of the lectures cover both important findings as well as major research approaches in the field. The behavioral traits in discussion include olfaction, mechanosensation, foraging, circadian rhythm, aggression, courtship, sleep, social recognition, learning and memory, etc. The organisms that we will discuss include invertebrates, vertebrates and humans. Life Science 1a.

## Philosophy

### PHIL 19 **Introduction to Philosophy of Religion**

Course ID: 108848

Faculty:

Next Term Offered: 2016 Fall

An examination of some central themes in the philosophy of religion. Topics include: arguments for and against the existence of God, divine attributes, the problem of evil, miracles, religious experience, the relation between religion and science, and life and death. Readings from historical and contemporary sources.

### PHIL 101 **Plato**

Course ID: 156020

Faculty:

Next Term Offered: 2016 Fall

A survey of Plato's views, with special attention to the nature of philosophical wisdom and its place in the good life. Likely readings include *Apology*, *Gorgias*, *Meno*, and *Protagoras*, with additional selections from *Phaedo*, *Philebus*, *Republic*, and *Theaetetus*. While our primary task is to understand and evaluate the theories expressed in Plato's dialogues, a secondary task is to examine issues of interpretive methodology that arise given that Plato wrote dialogues which predominantly feature a historical figure (Socrates) and which may or may not express a consistent set of views.

### PHIL 139 **Later Heidegger**

Course ID: 156116

Faculty:

Next Term Offered: 2016 Fall

A close reading of selected texts from Martin Heidegger's later work, starting from the period after the publication of *Being and Time*. Heidegger's later work rejects the humanism of his own earlier period as well as the humanist existentialism made famous by Sartre. In doing so, it attempts to gather and preserve meaningful possibilities of existence in our "destitute times." Topics will be chosen from among Heidegger's encounter with various figures in the history of philosophy as well as with such topics as thinking, poetry, gods, works of art, science, technology, and things.

### PHIL 145 **Modal Logic**

Course ID: 156023

Faculty:

Next Term Offered: 2017 Spring

An introduction to the semantics and metatheory of modal logic as well as some of its applications in philosophy and linguistics. Topics drawn from the following: Completeness, frames, and incompleteness for propositional modal logic; semantics for quantificational modal logics; provability interpretations of modal logic; intensional semantics for conditionals and other natural

language expressions.

### **PHIL 151Z Philosophy of Quantum Mechanics**

Course ID: 125896

Faculty:

Next Term Offered: 2018 Spring

A crowning achievement of 20th century science, quantum mechanics has raised deeply perplexing questions for physicists and philosophers alike: Does quantum mechanics show that the conscious mind has the power to make the physical world "jump"? That reality itself is constantly "splitting" into alternative versions? That the universe as a whole is in some deep sense "holistic"? And so on. In this course, we will attempt to separate the wheat of genuine mystery from the chaff of philosophical confusion, and along the way use quantum mechanics as an excuse to explore several fascinating and fundamental philosophical questions about science. No prior knowledge of quantum mechanics required.

### **PHIL 160 Readings in Philosophical Psychology**

Course ID: 109822

Faculty:

Next Term Offered: 2018 Spring

We will discuss a range of issues related to cognitive architecture. Topics will include some but probably not all of the following: the cognitive underpinnings of implicit bias, Bayesian theories of perceptual processing, the distinctions between perception and sensation, the distinctions between perception and cognition, the perception of agency, and the epistemology of perception.

### **PHIL 164 Metaphysics**

Course ID: 156025

Faculty:

Next Term Offered: 2017 Fall

We are going to explore, in the most general possible manner, two questions: What is there? And what is it (that is, whatever it is that there is) like? We're also going to explore the meta-question of whether and how genuine progress on these two questions can ever be made.

### **PHIL 173 Metaethics**

Course ID: 121779

Faculty:

Next Term Offered: 2016 Fall

A close examination of three metaethical views that take a deflationary approach toward the moral domain: nihilism, relativism, and expressivism.

**PHIL 187 Aesthetics**

Course ID: 111785

Faculty:

Next Term Offered: 2017 Spring

An examination of some texts of philosophical aesthetics from the 18th and 19th centuries, texts which either represent or anticipate the Romantic period. Themes include the role of emotion in art, the nature of expression and its relation to the will, problems of sincerity, and art or poetry as sources of knowledge. Readings will include some, but probably not all, of the following authors: Diderot, Schiller, Burke, Kant, Hume, Hegel, Lessing, Rousseau.

**PHIL 320L Philosophy in Translation: Latin**

Course ID: 160205

Faculty:

Next Term Offered: 2016 Fall

A close reading of philosophical texts in their original Latin language with the aim of developing reading and translation skills.

## Physics

### **PHYSICS 111 Cosmology**

Course ID: 156420

Faculty:

Next Term Offered: 2016 Fall

This course will introduce cosmology, the study of the large-scale evolution of the universe. Topics include the expanding universe; Friedmann-Robertson-Walker metrics; the evolution of the matter, radiation, and vacuum energy of the universe over time; evidence for dark matter; the Cosmic Microwave Background and its role in determining cosmological parameters; Big-Bang Nucleosynthesis; inflation and how it seeded the universe today; and the formation of structures like galaxies.

### **PHYSICS 141A Physics of Living Systems: Organism, Populations and Evolution**

Course ID: 156588

Faculty:

Next Term Offered: 2017 Spring

In this class we introduce discuss physical and quantitative aspects of multi-scale organization in biology. We will study the mechanics, dynamics and statistical physics of embryonic development, and see how physics-based approaches are used in an attempt to understand cancer. We will look at collective animal behaviors, the dynamics of population, ecology and extinction. Finally, we will study models of evolution and population genetics.

### **PHYSICS 165 Modern Atomic, Molecular, and Optical Physics**

Course ID: 132885

Faculty:

Next Term Offered: 2016 Fall

Includes the use of coherent electromagnetic radiation to probe and control atomic systems, use of traps to isolate atoms, molecules, and elementary particles for studies of ultracold quantum degenerate matter and precision tests of the standard model; resonance methods. Goals of course include acquainting student with these and other modern research topics while providing the foundations of modern atomic, molecular and optical physics research.

### **PHYSICS 196 Intro to Condensed Matter Physics**

Course ID: 156540

Faculty:

Next Term Offered: 2016 Fall

### **PHYSICS 216 Mathematics of Modern Physics**

Course ID: 127815  
Faculty:  
Next Term Offered: 2017 Spring

Introduction to functional analytic methods relevant for problems in quantum and statistical physics. Properties of linear transformations on Hilbert space. Generators of continuous groups and semigroups. Properties of Green's functions and matrices. Uniqueness and non-uniqueness of ground states and equilibrium states. Heat kernel methods. Index theory, invariants, and related algebraic structure. The KMS condition and its consequences.

### **PHYSICS 220 Fluid Dynamics**

Course ID: 110144  
Faculty:  
Next Term Offered: 2016 Fall

Continuum mechanics; conservation of mass and momentum, energy; stress, kinematics, and constitutive equations; vector and tensor calculus. Dimensional analysis and scaling. Navier-Stokes equations, Reynolds number. Solutions for simple flow states. Low Reynolds number flows; porous media flows; lubrication theory; gravity currents. Inviscid flows, Kelvin circulation theorem, Bernoulli integrals, Vortical flows. Waves in fluids; acoustics, shocks, water waves. Airfoil theory. Boundary layers. Flow instabilities. Mixing, and turbulence in unbounded and bounded flows.

### **PHYSICS 270 Mesoscopic Physics and Quantum Information Processing**

Course ID: 112834  
Faculty:  
Next Term Offered: 2016 Fall

Introduces the subject of quantum effects in electronic systems, including conductance fluctuations, localization, electron interference, and many-body effects such as the Kondo effect. This year, we will also focus on solid state implementations of quantum information processing systems.

### **PHYSICS 271 Topics in the Physics of Quantum Information**

Course ID: 121970  
Faculty:  
Next Term Offered: 2016 Fall

Introduction to physics of quantum information, with emphasis on ideas and experiments ranging from quantum optics to condensed matter physics. Background and theoretical tools will be introduced. The format is a combination of lectures and class presentations.

### **PHYSICS 283B Beyond the Standard Model**

Course ID: 118724  
Faculty:  
Next Term Offered: 2016 Fall

Covers current advances in particle physics beyond the Standard Model. Topics could include supersymmetry, the physics of extra dimensions, experimental searches, including for T violation, and connections between particle physics and cosmology.

### **PHYSICS 285A Modern Atomic and Optical Physics I**

Course ID: 118734

Faculty:

Next Term Offered: 2016 Fall

Introduction to modern atomic physics. The fundamental concepts and modern experimental techniques will be introduced. Topics will include two-state systems, magnetic resonance, interaction of radiation with atoms, transition probabilities, spontaneous and stimulated emission, dressed atoms, trapping, laser cooling of "two-level" atoms, structure of simple atoms, fundamental symmetries, two-photon excitation, light scattering and selected experiments. The first of a two-term subject sequence that provides the foundations for contemporary research.

### **PHYSICS 289R Euclidean Random Fields, Relativistic Quantum Fields and Positive Temperature**

Course ID: 118733

Faculty:

Next Term Offered: 2016 Fall

The course will give the reconstruction of relativistic quantum fields from Euclidean fields as well as the relation between representations of the Poincaré group to those of Euclidean group. Related topics are reflection positivity and Osterwalder-Schrader quantization, and supersymmetry, some of which will be covered.

### **PHYSICS 295B Quantum Theory of Solids**

Course ID: 127979

Faculty:

Next Term Offered: 2016 Fall

Theory of the electron liquid, Fermi liquid theory. Ferromagnetism of metals, BCS theory of superconductivity. Lattice models of correlated electrons: antiferromagnetism. Graphene: semi metals and quantum phase transitions. Non-fermi liquids in correlated metals.

### **PHYSICS 367A Experimental Astrophysics**

Course ID: 109034

Faculty:

Next Term Offered: 2016 Fall

**PHYSICS 367B Experimental Astrophysics**

Course ID: 110611

Faculty:

Next Term Offered: 2016 Fall

## Psychology

### **PSY 950 Psychology Live**

Course ID: 121377

Faculty:

Next Term Offered: 2016 Fall

Faculty will each lecture about their main area of research: its history, methods, and discoveries, focusing on contemporary research topics including perception, memory, cognitive development, animal cognition, social cognition, moral decision-making, consciousness, language, and psychopathology. Includes a view of methods to study the mind, brain and behavior involving neuroscientific techniques, evolutionary psychology, web-based experimentation, traditional laboratory experiments, and field studies. Emphasis is primarily human, as well as nonhuman primates.

### **PSY 1051 MATLAB: Introduction to Programming for Behavioral Research**

Course ID: 126619

Faculty:

Next Term Offered: 2017 Spring

This course will introduce students to the basics of the MATLAB user interface and programming language, for the purpose of using MATLAB to conduct behavioral research. In the first half of the course, you will learn about MATLAB syntax, general programming concepts such as functions, loops, and conditional statements, and how to analyze and visualize data in MATLAB. In the second half of the course, you will learn to program psychology experiments with the Psychophysics toolbox (a set of MATLAB functions), including displaying stimuli (visual and auditory), and collecting responses from participants.

### **PSY 1251 Circuits and Symptoms**

Course ID: 156586

Faculty:

Next Term Offered: 2017 Spring

This class will explore the biology of psychological illness. We will ignore artificial diagnostic labels, examining instead the core symptom domains that have plagued humans since the beginning of recorded history. A strong emphasis will be placed on biological mechanisms. In particular, the class will focus on mapping dysfunction in large-scale brain circuits to cognitive, affective, social, and motivational symptom domains, and on understanding how genes and environments act and interact to predispose these symptoms by shaping brain function and development.

### **PSY 1303 The Human Brain Then and Now**

Course ID: 108478

Faculty:

Next Term Offered: 2017 Spring

This course will explore the "mismatch" between our ancestral brain and the modern world. After

covering the evolution of the human brain, the bulk of the course will focus on case studies including how drugs hijack the normal function of brain systems, how the Facebook age places stresses on social systems that evolved to handle close-knit groups of 25 or so individuals, and how the brain degenerates as we live unexpectedly long.

### **PSY 1307 Brain Genomics**

Course ID: 125512

Faculty:

Next Term Offered: 2017 Spring

Genetics provides a powerful approach for exploring human behavioral variation and learning how dysfunction in neural circuits influences cognition. This course will cover the basics of genetic inheritance and genomic sequencing to understand brain function. Topics include autistic disorders, schizophrenia, and normal cognitive variation. The goals of the class will be (1) to debate the potential of bridging genomics and human neuroscience, and (2) to survey recent successes in brain genomics.

### **PSY 1352 Foundations of Cognitive Neuroscience Research**

Course ID: 121887

Faculty:

Next Term Offered: 2016 Fall

Intended for undergraduates or those with limited background in cognitive neuroscience. Students will attend and participate in laboratory research and in a seminar that includes discussion of active scientific projects, recent important journal articles, and didactic lecture on technical aspects of methods central to cognitive neuroscience research. Readings will be assigned that survey basic principles of system neuroscience, cognitive science, and methods including functional MRI, MEG, and single unit physiology.

### **PSY 1354 Classic Papers on Memory (and the Ones that Got Away!)**

Course ID: 108004

Faculty:

Next Term Offered: 2017 Spring

Classic articles in memory will be discussed in the context of why they are seminal to the field. Topics will include amnesia, LTP, levels of processing, implicit memory, brain imaging, and prospection. Within each topic, articles that are less seminal, but reported earlier, will also be discussed. A goal will be to debate what specifically allowed the classic articles to change the way we think. What sets them apart?

### **PSY 1358 Cognitive and Neural Aspects of Object and Action Knowledge**

Course ID: 127902

Faculty:

Next Term Offered: 2016 Fall

Knowledge of objects and actions encompasses their perceptual and motor properties as well as more abstract properties such as information about their function (e.g., what they are used for, the goal of an action). In this seminar, we will explore the relationship between the sensory-motor processes involved in the perception of objects and the execution of actions and the organization and representation of the conceptual knowledge associated with objects and actions. We will review critically the relevant behavioral, neuroimaging and neuropsychological research.

**PSY 1452 The Human Face**

Course ID: 126803

Faculty:

Next Term Offered: 2017 Fall

Your face contains a hidden code that instantly communicates who you are, how you're feeling, and what your intentions may be. Whether accurate or inaccurate, human brains extract information in a fraction of a second from faces and use it to make simple and complex judgments about people. Perceived facial attractiveness can be hugely consequential in real world encounters. The media surrounds us with images of faces and hidden cameras record our own faces many times a day. We will explore "decoding" the human face from computational, psychological and biological perspectives, providing comprehensive review of this highly interdisciplinary field

**PSY 1601 Developmental Disabilities**

Course ID: 107452

Faculty:

Next Term Offered: 2017 Fall

An introduction to developmental disorders from the perspective of psychology and cognitive neuroscience. We will focus on the most commonly diagnosed developmental difficulties such as autism, ADHD, and specific impairments in language and math. We will take an integrative approach and consider the clinical presentation of each disorder, theoretical frameworks, research on the causes and consequences, and issues in education and treatment.

**PSY 1750 Free Will, Responsibility, and Law**

Course ID: 123305

Faculty:

Next Term Offered: 2016 Fall

Examines the issues of free will and responsibility from philosophical, psychological, and neuroscientific perspectives, with special attention paid to potential legal applications.

**PSY 1801 Anxiety Disorders**

Course ID: 114346

Faculty: Richard McNally

Next Term Offered: 2017 Spring

Concerns current theory and research on the etiology and treatment of anxiety disorders (e.g., panic disorder, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder). Cognitive, behavioral, and biological approaches are emphasized.

### **PSY 1851 Clinical Psychology: Science and Practice**

Course ID: 118402

Faculty:

Next Term Offered: 2018 Spring

Extends the material covered in Psychology 18 in a more clinical direction. Provides students with an opportunity to approach issues in clinical psychology from a scientist-practitioner perspective. Focuses on how research-based approaches to the study and treatment of psychopathology can translate into high quality ethical care for patients with major psychiatric problems.

### **PSY 1854 Schizophrenia: Seminar**

Course ID: 111940

Faculty:

Next Term Offered: 2018 Spring

Examines schizophrenia and schizophrenia-spectrum disorders from biological, psychological, and psychosocial perspectives. Focuses on early (e.g., Kraepelin) and modern (e.g., DSM-IV) perspectives, clinical case descriptions of the disorder, and recent theoretical and empirical developments in understanding etiology, phenomenology, and treatment.

### **PSY 2050 History of Psychology**

Course ID: 112930

Faculty:

Next Term Offered: 2016 Fall

Reviews psychology in the late 19th and 20th centuries, starting with sensation and perception, exceptional mental states, educational psychology, personal and social design and theoretical behaviorism, progressing to cognitive, developmental, personality, clinical, and social programs.

### **PSY 2060 Reward and Self Control**

Course ID: 108524

Faculty:

Next Term Offered: 2017 Spring

What's stopping you from doing absolutely everything that your devious heart desires? The ability to flexibly control our behavior - particularly when it comes to rewarding things like food, sex, and drugs - has huge consequences for our long-term happiness and success. Though we are reasonably good at this as a species, dramatic individual differences in the capacity for self-control are readily apparent. In this class, we will examine the cognitive construct of self-control, its neurobiological underpinnings and sources of individual variation, and relationships to

psychopathology.

**PSY 2145 Developmental Cognitive Neuroscience**

Course ID: 127665

Faculty:

Next Term Offered: 2018 Spring

This course uses neuroscience methods to study the cognitive development of human infants and children. Case studies draw from research on face recognition, language, executive function, representations of objects, number and theory of mind.

**PSY 2170 Developmental Proseminar**

Course ID: 115572

Faculty:

Next Term Offered: 2016 Fall

Proseminar in conceptual development and language acquisition.

**PSY 2190 Topics in Language Acquisition**

Course ID: 116646

Faculty:

Next Term Offered: 2016 Fall

Seminar examining alternate theories of language acquisition and assessing their empirical validity. Focuses on speech perception, word learning, semantic and early syntactic development, interactions between language acquisition and cognitive development, and children's online language comprehension.

**PSY 2353 Case Studies of Cognitive and Neural Models**

Course ID: 108988

Faculty:

Next Term Offered: 2018 Spring

What makes a successful cognitive or neural model? In this seminar, we will do a series of in depth case studies to address this question, exploring several of the more successful cognitive and neural models. While many examples will be drawn from the literature on human vision, the course will also draw on examples from language, development, and higher-level reasoning.

**PSY 2420 Cognitive-Behavioral Treatment of Psychological Disorders**

Course ID: 144980

Faculty:

Next Term Offered: 2017 Fall

Covers current cognitive-behavioral approaches to the treatment of common psychological disorders in adults. Emphasis is on the practical aspects of treatment, and on treatment outcome research. Includes theoretical underpinnings of cognitive-behavioral therapy.

### **PSY 2445 Psychological Treatment Research**

Course ID: 118606

Faculty:

Next Term Offered: 2017 Fall

Review theories of behavior change, methods of studying such change (single-case research designs, randomized clinical trials, etc.), and current evidence-based approaches to assessing and treating psychopathology. Examines historical, ethical, and cultural issues.

### **PSY 2460 Diagnostic Interviewing**

Course ID: 113704

Faculty:

Next Term Offered: 2018 Spring

Students develop clinical interviewing and diagnostic skills using the Structured Clinical Interview for DSM-III-R and other instruments. Examines issues in diagnosis and assessment; provides exposure to psychopathology syndromes via tapes and clinical interviews.

### **PSY 2550 The Psychology of Learning and Teaching**

Course ID: 110321

Faculty:

Next Term Offered: 2017 Spring

As the pedagogical paradigms and practices of higher education are innovated at Harvard and beyond, what claims or assumptions about cognitive and social psychology are being tested? How can concepts, principles, and evidence from the psychological sciences inform university-level learning and teaching, and how can applied educational research inform our basic understanding of mental and social processes? In this seminar, the varied phenomena of higher education today—from MOOCs and flipped classrooms to grading and procrastination—will be used as a proving ground for understanding and evaluating major ideas and evidence from psychology.

### **PSY 2651 Social Cognition from a Developmental and Evolutionary Perspective**

Course ID: 126553

Faculty:

Next Term Offered: 2016 Fall

The course addresses traditional questions about the role of social cognition in human evolution and development, integrating the newest findings from comparative and developmental psychology. The course is structured around three themes (cultural learning, cooperation, and competition), corresponding to the three main theoretical approaches that have given rise to the

study of social cognition from an evolutionary perspective. This course is discussion-based, bringing some new ideas (your ideas!) to bear on tricky questions that are still unresolved in the field.

### **PSY 2653 Experimental Methods for Behavioral Research**

Course ID: 109000

Faculty:

Next Term Offered: 2018 Spring

This course is aimed at doctoral students who intend to conduct experimental and quasi-experimental research for the study of individuals' behavior in business (e.g., marketing, organizational behavior) and related disciplines (e.g., psychology). The primary objective of the course is to provide students with the concepts and tools needed for planning and designing laboratory experiments, and for collecting and analyzing behavioral data. The course will also discuss other methodologies that may be helpful when working with field sites (namely, field experiments and surveys). A secondary objective is to provide students the foundations for the methodological evaluation of other behavioral researchers' work - a skill that will be helpful in their role as future academic reviewers. The course thus covers the designs and analyses that are most often used by experimental researchers in psychology, organizational behavior, and also marketing. The course will be hands-on and oriented towards providing technical skills for the design and implementation of laboratory experiments, including overcoming possible pitfalls and common barriers. The course assignment will be for students to write a proposal outlining the theory, design, power analyses, and proposed analysis for a laboratory experiment. Our hope is that the students will conduct the research during the course or afterwards, and that this course will help design and conduct impactful and rigorous behavioral research. Overall goal The overall goal of the course is for students to understand that how they design their experiment (all aspects of it) has a large role in whether they can answer their research questions. Please note that the course will begin on Monday, September 8th.

### **PSY 3250 Psychological Testing**

Course ID: 118610

Faculty:

Next Term Offered: 2018 Spring

This weekly seminar for graduate students in clinical psychology is designed to provide basic skills in administering and interpreting standardized tests in the areas of intellectual assessment and personality assessment.

### **PSY 3450 Statistical Learning**

Course ID: 110487

Faculty:

Next Term Offered: 2017 Spring

This course focuses on modern methods from the areas of Statistical Learning and Machine Learning (and Data Science). The first series of lectures covers basic regression techniques for

ordinal data (ordinal/multinomial logit models) as well as advanced techniques such as generalized additive models, shrinkage methods, and friends. The next series covers advanced techniques of principal component analysis (PCA) such as independent component analysis (ICA), sparse PCA, and nonlinear (categorical) PCA. Another lecture series deals with clustering techniques such as simple hierarchical clustering, k-means, BIRCH, affinity propagation, and mixture models. The mixture model approach will then be embedded into a regression context in order to estimate regression models with unobserved heterogeneity. Finally, there will be a couple units on functional data analysis (FDA). All topics covered will be supported by corresponding computations in R. Lab units will focus R programming (R infrastructure, object oriented principles, package building) and on special topics such as fMRI data analysis in R.

### **PSY 3490 Advanced Statistical Modeling and Psychometrics Using R**

Course ID: 107774

Faculty:

Next Term Offered: 2018 Spring

This course introduces advanced statistical and modern psychometric methods such as Bayesian approaches (inference, predictions, MCMC), causal modeling (inference, moderator/mediator, graphical models), social network analysis (SNA measures, subgroups, visualization), multivariate exploratory methods (biplots, correspondence analysis, multidimensional scaling), item response theory, meta analysis, and machine/statistical learning (clustering, discriminant analysis support vector machines). All topics covered will be supported by corresponding computations in R. Lab sections will focus on Web Scraping, Text Mining, and data visualization.

### **PSY 3560 Professional Development**

Course ID: 110489

Faculty:

Next Term Offered: 2018 Spring

### **PSY 3900 Professional Ethics**

Course ID: 112225

Faculty:

Next Term Offered: 2018 Spring

Examines ethical principles and legal issues involved in the practice of psychology, with an emphasis on clinical psychology. Covers ethical principles and code of conduct; uses case examples to highlight the application of these principles.

Religion, The Study of

**RELIGION 1212A Judaism: The Liturgical Year**

Course ID: 116591

Faculty:

Next Term Offered: 2016 Fall

An introduction to the Jewish tradition through an examination of its liturgical calendar. The ancient Near Eastern affinities and biblical forms of the Jewish holidays; the observance of the holidays in rabbinic law, their characteristic themes as developed in rabbinic non-legal literature, their special biblical readings, the evolution of the holidays over the centuries, contemporary theological reflection upon them. Emphasis on classic texts, focus on theological and literary issues.

**RELIGION 1212B Judaism: The Liturgical Year**

Course ID: 122954

Faculty:

Next Term Offered: 2016 Fall

A continuation of Religion 1212a.

**RELIGION 1310 Foreign Religions, Otherness and Identity in the Graeco-Roman World: Seminar**

Course ID: 112448

Faculty:

Next Term Offered: 2016 Fall

A socio-historical study of the process of introduction and installation of new cults as refracted through the lens of the Graeco-Roman world. This study will aim at understanding how and to what extent the integration of "foreign" elements contributed to the construction of the identity and ideology of ancient Greeks and Romans. A comparative and multidisciplinary approach will be applied particularly to the periods of Classical Greece (5th century B.C.E.) and Republican Rome (4-1st century B.C.E.) as well as to the Imperial period (1-3rd century C.E.). Specific cases of introduction, acculturation, and integration of "foreign" cults, such as those of Cybele, Bendis, Mithras, and Isis will be analyzed by incorporating such diverse disciplines as literature, philosophy, anthropology, iconography, and archaeology. Emphasis will be placed on political and cultural context and also on the symbolism of sacred topography in Athens and Rome. Finally, the work of several postmodern sociologists and philosophers (Derrida, Levinas, Baudrillard, Smith, etc.) will be brought to bear on issues of cultural identity and otherness.

**RELIGION 2018 Women, Religion, and the Problem of Historical Agency**

Course ID: 156255

Faculty:

Next Term Offered: 2016 Fall

This course examines recent scholarship on women in American religious history, focusing particularly on questions of narration, agency and power. We will ask several interrelated

questions: How have historians integrated women into narratives of American religious history? Whose stories have they highlighted, and why? How have they conceptualized women as historical agents? We will read major interpretive works as well as theoretical accounts of gender, social structure, and power. Readings will explore the diversity of religious traditions in America, including Puritanism, Judaism, Mormonism, Catholicism, African-American Christianity, evangelicalism, and Islam.

## Romance Languages and Literatures

### **FRENCH 70C Introduction to French Literature III: The Francophone World**

Course ID: 118532

Faculty:

Next Term Offered: 2016 Fall

Studies literature and film from sub-Saharan Africa, the Maghreb, the Caribbean, Québec, Vietnam, and Afghanistan. Discussions centered on questions of cultural identity, language, postcoloniality, diaspora, trauma and memory.

### **FRENCH 71A Classicism and Modernity: An Introduction to Performance**

Course ID: 109826

Faculty: Sylvaine Guyot

Next Term Offered: 2016 Fall

Is the stage of the past the "other" of modern theater? We will explore the relationship between classicism and modernity by considering a set of plays representative of central trends in French drama from the early modern age to contemporary times. Readings include the most famous playwrights of both the 17th (Molière, Corneille, Racine) and the 20th-21st centuries (Sartre, Badiou, Lagarce, N'Diaye). Special emphasis paid to the ideological power of images through theatrical workshops and video versions of recent productions. The final project consists of an excerpt to be performed in French.

### **FRENCH 90W "Bad" Women in French Literature**

Course ID: 109831

Faculty:

Next Term Offered: 2016 Fall

This course studies how societal and historical norms can be approached and investigated from perspectives of so-called "bad" femininity. Literary texts may include Jean d'Arras *Mélu*sine, Corneille's *Médée*, Molière's *Les Femmes Savantes*, Flaubert's *Madame Bovary*, Proust's *Du côté de chez Swann* and Ken Bugul's *Le Baobab fou*. We will also approach these texts through the lenses of contemporary critical feminist and queer theory using relevant texts by thinkers such as Michel Foucault, Judith Butler, Luce Irigaray and Sara Ahmed.

### **FRENCH 136 Feminist Literary Criticisms**

Course ID: 113452

Faculty:

Next Term Offered: 2016 Fall

Close readings of postwar French fiction and theory with emphasis on what is called "the feminine" in key psychoanalytic, philosophical, and literary writings of the French poststructuralist tradition. What has been the legacy of fifty years of dialogue between French postwar theory and feminist practice in the US? Writers considered include Cixous, Duras, Hyvrard, Irigaray, Kristeva, and Wittig as well as Deleuze, Derrida, and Lacan.

**FRENCH 180 "The Words to Say It": Women Writing in French from Colette to Satrapi**

Course ID: 156556

Faculty:

Next Term Offered: 2016 Fall

Motherhood, romantic love, independence, sexuality, citizenship, fantasy, death: these are just some of the themes explored in women's novels, written in French, in the twentieth century. We will read eight novels together, exploring how they have finally become classics, even given what they say about life and what it means for women to write about it.

**FRENCH 216 The Romance of the Rose**

Course ID: 109833

Faculty:

Next Term Offered: 2016 Fall

Merging courtly love with Aristotelian quest for knowledge, the *Roman de la Rose* is one of the most influential medieval texts. We will read the Rose in company of related classical and medieval texts, such as Boethius' *Consolation of Philosophy*, troubadours poetry or the exchange of letters between Christine de Pizan and literati of her time about the Rose. We will also take into consideration manuscript illustration. .

**FRENCH 226 Tragic Bodies: French Classicism Revisited**

Course ID: 109974

Faculty:

Next Term Offered: 2016 Fall

French neoclassical tragedies are typically known for their de-emphasis of the body's presence. This seminar seeks to address this neglected topic by considering the incarnation on stage of heroism, the (re)presentation of loss and violence, and the emerging ideal of tenderness and gallantry in the drama of Corneille and Racine, as well as of few other playwrights. Special emphasis paid to the political, philosophical and aesthetic contexts. Intersection of drama, dance, and painting will be explored. Theoretical readings include Agamben, Barthes, Certeau, Didi-Huberman, Foucault, Marin, Rancière.

**FRENCH 240 Rabelais**

Course ID: 156635

Faculty: Tom Conley

Next Term Offered: 2017 Spring

Studies five books of Pantagruel and Gargantua with emphasis on creative energy in the *facétie* and comic genres. Accounts for new critical currents and projects in theater, music and cinema.

**FRENCH 271 Legacies of Poststructuralism: Ecology French Style**

Course ID: 126899

Faculty:

Next Term Offered: 2016 Fall

Focuses on how the environment is inscribed in works drawing on concepts from poststructuralist theories. Texts by Guattari, Latour, Nancy, Balibar, Ranciere, Stengers, Haraway, Heise, and others. Students are encouraged to pair their readings with fictional texts and other media.

**ITAL 103 Italian Travels**

Course ID: 126087

Faculty:

Next Term Offered: 2016 Fall

An exploration of the identities of Italy through travel, including that of Italians living abroad and non-Italians in contemporary Italy. Students will investigate these issues from a wide variety of sources, including literary and historical voyages, sociological texts, news reports and feature films. Frequent oral and written assignments.

**ITAL 104 Effetto Commedia: What Makes Italians Laugh?**

Course ID: 108704

Faculty:

Next Term Offered: 2016 Fall

Comedy Italian-style in cinema and its origins, from Totò to Benigni. Presents students with another dimension of Italian culture, while increasing communicative effectiveness. Presentational skills addressed through weekly written assignments and oral reports; grammar review in context. Weekly feature-length film.

**ITAL 110 Italian Mysteries**

Course ID: 156583

Faculty:

Next Term Offered: 2016 Fall

The single best-selling genre in modern times, the mystery has been embraced by Italian novelists and academics alike. Whether the goal was searching for the motive or the culprit of a crime or redressing a past or present injustice, or questioning the limits of our investigations of the past, the mystery has attracted the attention of internationally renowned figures such as Umberto Eco, Leonardo Sciascia, Carlo Ginzburg, Andrea Camilleri, Michelangelo Antonioni and Alessandro Manzoni. Beginning with contemporary best-sellers, the course will cover a variety of genres - novels, comic books, films, historical writing - from the nineteenth century to the present.

**ITAL 180 Making Italians: Poetry and Novel in the 19th Century**

Course ID: 109994

Faculty:

Next Term Offered: 2016 Fall

The course discusses the two masterpieces of modern Italian literature, Giacomo Leopardi's *Canti* (Poems) and Alessandro Manzoni's *I promessi sposi* (The Betrothed), against the background of Risorgimento, the unification of Italy, and the affirmation of modernity.

### **PORTUG 61 Performing Arts in The Portuguese-Speaking World**

Course ID: 127864

Faculty:

Next Term Offered: 2016 Fall

Through plays, visual media, poetry, songs, and other cultural creations, this course discusses historic and cultural connections between Portuguese-speaking countries (Angola, Brazil, Cape Verde, East Timor, Guinea-Bissau, Mozambique, Portugal, and São Tomé and Príncipe). The course uses the performing arts as a point of departure for cultural and linguistic development, having class discussions and student presentations as a basis for journal entries, essay writing, and performance. Grammar review and stylistic analysis are integrated with activities and projects throughout the course.

### **PORTUG 90ML Brazilian Popular Music and Literature**

Course ID: 156543

Faculty:

Next Term Offered: 2016 Fall

Explores the relationship between Brazilian popular music traditions and literature.

### **PORTUG 123A Portuguese Literary Studies I**

Course ID: 156538

Faculty:

Next Term Offered: 2016 Fall

An overview of the literature of Portugal centering on its major figures and aesthetic movements, with attention given to selected moments in cultural history through the eighteenth century. Readings and discussions will include analyses of specific texts and considerations of topics such as gender, sexuality, race, and globalization in the Portuguese context.

### **PORTUG 264 Colonial Brazil**

Course ID: 156730

Faculty:

Next Term Offered: 2016 Fall

We will study the literary culture of colonial Brazil, with consideration of Brazil's place in transatlantic enterprise.

## **ROM-STD 79 Romance Languages and Cultures in Comparative Perspective**

Course ID: 120108

Faculty:

Next Term Offered: 2016 Fall

Highlights of the similarities and differences among the Romance languages, beginning with an overview of the historical development of the Romance languages from Latin, and moving on to the comparison of linguistic identifiers of French, Italian, Portuguese, and Spanish; may also include a discussion of Catalan. Topics will cover comparative phonology, morphology, and syntax, as well as some cross-cultural experiences such as immigration and translation.

## **ROM-STD 111 The World of Romance Language Cinemas: A Classical Age**

Course ID: 108776

Faculty: Tom Conley

Next Term Offered: 2016 Fall

Studies early and classical cinemas in France, Italy, and Spain through comparative and close analysis. Includes films by Renoir, Vigo, Melville; Rossellini, de Sica, Visconti; Buñuel, García Berlanga, Erice.

## **ROM-STD 205 Civic Humanities**

Course ID: 128246

Faculty:

Next Term Offered: 2016 Fall

An introduction to a developing field, Civic Humanities explores the arts and humanistic interpretation through a centuries-long tradition of civic engagement. Here the humanities are a site for promoting innovation and skills for active citizenship. Democracy and aesthetic judgment developed together to project citizens as co-artists of social constructions. Readings in this tradition of enlightened aesthetics include Kant, Schiller, Dewey, Freire, Gramsci, Ranciere, Mockus, Boal, Kester, Elster, Florida, Nussbaum, and Pasolini. Guest lectures by doctors, lawyers, political leaders, business experts, and public artists will develop specific areas of innovation and represent potential mentors for students as they design original projects.

## **ROM-STD 219 Digital Humanities 2.0: a metaLAB(at)Harvard seminar**

Course ID: 128286

Faculty:

Next Term Offered: 2016 Fall

A seminar and workshop for the development of semester-long projects, the course provides an introduction to new scholarly models in the arts and humanities via readings, case studies and conversations with expert practitioners.

**ROM-STD 220 Fragments of a Material History of Literature**

Course ID: 108779

Faculty:

Next Term Offered: 2016 Fall

Literary studies examined from the perspective of the practices that have shaped ideas concerning literature, writing, speech, and communication: from scrolls and codices to the rise of printing and typewriting to digital writing.

**SPANSH 70A Heroes, Rogues, Lovers, Rebels, Saints: Voices from Medieval and Early Modern Spain**

Course ID: 110853

Faculty:

Next Term Offered: 2016 Fall

Who are the Cid, Lazarillo, Rosaura and Segismundo? As we explore the texts and historical contexts that produced iconic figures like the matamoros, the sentimental Moor, the picaro, the soldier-poet, the mystic, the rebellious vassal and the cross-dressed woman, we bring their voices to life through dramatic reading and performance.

**SPANSH 90NP Invaders as Ancestors, Gods and Vampires**

Course ID: 156646

Faculty:

Next Term Offered: 2016 Fall

In Latin American literature, familiar and unfamiliar beings, under the guise of gods, ancestors or vampire-like creatures, dominate representations of conquest and invasion. Drawing on texts by Indian and Spanish authors alike, we examine the reception of these mythic beings and their place in historical narratives of the conquest of Mexico, the American Southwest, and the Andes. As part of our exploration of the genres of indigenous historiography, students may present a graphic essay or performance with an accompanying "Scholar-Artist Statement" as their final project.

**SPANSH 109 Displacing Spain: Workshop on 20th and 21st-Century Transatlantic Poetry**

Course ID: 127556

Faculty:

Next Term Offered: 2016 Fall

We will read, listen to, and play with poems dealing with transatlantic perspectives on and from modern Spain. Close attention paid to the relation between poetry and identity, motherland, exile, and nomadism in Spanish and Latin American poets such as Bolaño, Cernuda, Darío, García Lorca, Neruda, Peri Rossi, and Vallejo, among others. Includes formal and thematic analysis of poems and hands-on work with texts in Spanish through translation.

**SPANSH 120 Medieval Spain in the Poem of the Cid**

Course ID: 156600  
Faculty:  
Next Term Offered: 2016 Fall

Major themes and critical approaches in the study of the Castilian epic poem *Cantar de mio Cid* and the Cidian tradition (especially in the *Romancero*).

**SPANSH 125 The New Art of Telling Stories in Spanish: Cervantes's Novelas Ejemplares and Other Short Fiction**

Course ID: 109765  
Faculty:  
Next Term Offered: 2016 Fall

Before the novel was the novella. Early modern short stories hold up revealing mirrors to society, history and literature, offering \$ as Horace recommends \$ instruction and entertainment for an expanding readership in a changing world. Works studied include picaresque, Moorish tales, miscellanies, joke-books, Cervantes's Novelas ejemplares (1613) and Maria Zaya's tragic love stories. Taught in Spanish

**SPANSH 158 Transversal Poetics: Workshops on Translation and Transcreation of Latin American Poetry**

Course ID: 109770  
Faculty:  
Next Term Offered: 2016 Fall

An inquiry into the notion of transversal poetics: the theory and practice of poetry as a form of expression that brings together distinct ways of making sense with language. Structured as a workshop. Assignments include: translation of poems into English; rendition of poems into formats other than print (fliers, broadsheets, slideshows, installations, etc.). Readings by Augusto and Haroldo de Campos, Zurita, Kamenszain, Cucurto, Maquieira. Course conceived in conjunction with Latin American poetry symposium November 2013.

**SPANSH 171 Barcelona and the Catalan Culture**

Course ID: 109775  
Faculty:  
Next Term Offered: 2016 Fall

The course offers an interdisciplinary approach to Barcelona, a multilayered space furnished by Roman, French, Muslim, and Spanish legacies that shaped a singular culture and language. Developing from periods of egalitarian social and political institutions in the Middle Ages to strong socioeconomic industrial development in the 19th century and later tourism, Spain's most European city is inscribed by a deep sense of civic and industrious society permanently seeking innovation and modernity, yet facing the consequences of its complex past. Through readings of historians, art critics, urban designers, and writers, and supported by visual materials, the course offers an integrated perspective which opens questions in every field of the Humanities and the Social Sciences on Catalan and Hispanic Cultures.

**SPANSH 179 Regarding the Pain of Spain**

Course ID: 108749

Faculty:

Next Term Offered: 2016 Fall

We will explore modern representations of violence in Spanish history through close analyses of short stories, novels, memoirs, paintings, and films by Spanish and some Latin American authors. Issues discussed may include *la España negra*, black humor, bullfighting, colonial power, concentration camps, gothic horror, sexual abuse, state repression, terrorism.

**SPANSH 201 Historia de la lengua española**

Course ID: 116500

Faculty:

Next Term Offered: 2016 Fall

Introducción a la historia de la lengua española desde sus orígenes hasta el presente. Escarceos en lingüística histórica en el marco de la historia literaria y el estudio comparado de las lenguas románicas. Acercamiento interdisciplinario.

**SPANSH 254 Imagining Caribbean Communities: Border, Nations, and Diaspora in Contemporary Hispanic Caribbean Li**

Course ID: 156598

Faculty:

Next Term Offered: 2016 Fall

This course explores the imagining of Caribbean communities through literary and cultural representations. Setting off from the concept of Pan-Caribbean solidarity that José Martí imagined at the end of the nineteenth century, we will look at the ways in which notions of Caribbean communities have been imagined, and deployed through literary and cultural representation. Focusing on questions of race, class, nation, and migration(s) our course will create a dialogue among late nineteenth and early twentieth century canonical Caribbean thinkers such as Juan Bosch, and Eugenio María de Hostos and lesser-known contemporary writers like Rita Indiana Hernández and Rey Andújar. Our course will be organized thematically, proposing a trans-national and trans-historical view of Caribbean intellectual and literary history. The theoretical framework will engage current race, nation, migration, and transnational feminist theories with a focus on Caribbean criticism.

## Slavic Languages and Literatures

### **SLAVIC 141 Russian Drama and Performance**

Course ID: 108365

Faculty: Julie A. Buckler

Next Term Offered: 2016 Fall

Investigates performance and theatricality in imperial, Soviet, and post-Soviet contexts, in both art and life, through broad exploration of theoretical underpinnings (classical dramatic theory to contemporary performance studies) and case studies from drama, opera, ballet, film, musicals, performance art, religious ritual and folk festival, monarchy and court, mass spectacles, Cold War competitions and diplomacy, subcultures, and contemporary assertions of new orders.

### **SLAVIC 148 Strange Russian Writers**

Course ID: 115702

Faculty: Stephanie Sandler

Next Term Offered: 2017 Spring

Studies Russia's rebels, deviants, martyrs, loners, and losers as emblems of national identity. Stories, films and poems that project Russia's distinctive obsessions with history and religion. Includes Gogol, Dostoevsky, Tolstoy, Leskov, Kharms, Platonov, Nabokov, Petrushevskaya, Prigov; films by Eisenstein, Tarkovsky, Askoldov, Sokurov.

### **SLAVIC 150 Moscow and St. Petersburg**

Course ID: 108383

Faculty: Julie A. Buckler

Next Term Offered: 2017 Spring

Explores the literary and cultural histories of Russia's two capital cities, their "urban geographies" and representations in visual and performing arts. Includes Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Bely, Zamyatin, Bunin, Bulgakov, Nabokov, Erofeev, Bitov, Tolstaya, Pelevin, Sokurov, Balabanov, Bekmambetov.

### **SLAVIC 152 Pushkin**

Course ID: 122913

Faculty: William Todd

Next Term Offered: 2018 Spring

A survey of the lyrics, narrative poems, fiction, and critical prose of Russia's "national poet." Close reading of the texts; attention to contemporary cultural issues. Lecture and discussion.

### **SLAVIC 156 Nabokov: A Cross-Cultural Perspective after the Cold War**

Course ID: 108458

Faculty:

Next Term Offered: 2016 Fall

Examines Nabokov's poetry, novels, short stories and essays from Russian, European and American periods. Attention to issues of literary modernism, play, cultural translation and memory in the wake of the Cold War. Additional readings from Chekhov, Proust, Borges, and others.

**SLAVIC 159 War and Peace**

Course ID: 156075

Faculty: Justin Weir

Next Term Offered: 2017 Fall

**SLAVIC 186 Poetry after Brodsky: How Russian Is It?**

Course ID: 124482

Faculty: Stephanie Sandler

Next Term Offered: 2017 Fall

Studies poetic practice since 1970. Includes Brodsky, Aygi, Dragomoshchenko, Eremin, Fanailova, Gronas, Mnatsakanova, Prigov, Sedakova, Shvarts, and others. Studies border crossings (in language and geography), connections to other art forms, and the changing representations of emotion and mind in contemporary poetry.

**SLAVIC 192 Literature as Institutions: Conference Course**

Course ID: 109587

Faculty: William Todd

Next Term Offered: 2016 Fall

A study of literary production, dissemination, and reception in selected periods of Russian literature from the Middle Ages to the present. Readings in social theory, cultural studies, literary criticism, and imaginative literature.

**SLAVIC 195 Myths of Central Europe after World War II: Conference Course**

Course ID: 119278

Faculty: Jonathan Bolton

Next Term Offered: 2017 Spring

For Milan Kundera, Central Europe was the kidnapped conscience of the West; for György Konrád it was "a subversive dream," for Josef Kroutvor a "melancholy grotesque." Considers major authors (Kundera, Havel, Hrabal, Kiš, Miłosz, Herling-Grudziński, Márai, Albahari) and key motifs and situations (occupation, resistance, and collaboration; interrogation, censorship, and dissent; emigration and exile; "anti-politics") that have defined a "Central European" literature and identity in Austria, Czechoslovakia, Poland, Hungary, and Yugoslavia since World War II.

**SLAVIC 230 Medieval, Renaissance, and Baroque Prague: A Cultural History**

Course ID: 109672

Faculty: Jonathan Bolton

Next Term Offered: 2016 Fall

History of Prague and Bohemian culture from the Middle Ages to the eighteenth century, including Kosmas's *Chronicle of the Czechs*, the medieval court of Charles IV, Jan Hus and the Hussite war, Renaissance learning under Rudolf II, Baroque literature and art, and the changing fates of Prague Jewish culture. Special emphasis on the development of Czech literature and the Czech literary language.

**SLAVIC 231 Czech Literary Culture, 1900-1945**

Course ID: 126615

Faculty: Jonathan Bolton

Next Term Offered: 2017 Spring

Close reading of major works of poetry and prose in the original Czech, with attention to the larger cultural currents of Central European modernism. Prose by Čapek, Hašek, Vančura, Olbracht, Šalda; poetry by Nezval, Halas, Holan, Orten, Kolár, and others.

**SLAVIC 251 Reading Anna Karenina**

Course ID: 127636

Faculty: Julie A. Buckler

Next Term Offered: 2016 Fall

Close reading of *Anna Karenina* in original Russian with exploration of cultural context, artistic biography, tradition of nineteenth-century psychological novel, reception and interpretive paradigms, potential for new ways of reading.

**SLAVIC 252 Rereading Russian Intellectual History**

Course ID: 156361

Faculty: Justin Weir

Next Term Offered: 2018 Spring

This seminar reviews the standard texts and topics of pre-Revolutionary Russian intellectual history. Course readings include works by Chaadaev, Herzen, Belinsky, Chernyshevsky, Pisarev, Bakunin, Solovyov, and others. The seminar also considers methodological problems and how approaches to writing Russian intellectual history have evolved from the last half of the twentieth century to the post-Soviet era.

**SLAVIC 287 Poetic Self-Creation in 20th-Century Russia: Seminar**

Course ID: 112321

Faculty: Stephanie Sandler  
Next Term Offered: 2016 Fall

Examines how poems create self-images for poets working in and after Russian modernism, including Khlebnikov, Vvedenskii, Mandel'shtam, Tsvetaeva, Barkova, Brodsky, Sedakova, Shvarts, Dragomoshchenko. Relies on literary and psychoanalytic theories of identity.

**SLAVIC 289 Elegy: The Art of Losing**

Course ID: 125567

Faculty: Stephanie Sandler

Next Term Offered: 2018 Spring

Poems, films, visual artifacts, and music alongside theories of loss. Focuses on non-narrative forms, with examples from Pushkin, Baratynsky, Fet, Brodsky, Shvarts; Tarkovsky, Shemiakin, Sokurov; Silvestrov, Sebald.

## Social Studies

### **SOC-STD 98AX Development and Modernization: A Critical Perspective**

Course ID: 116329

Faculty: Stephen Marglin

Next Term Offered: 2016 Fall

What assumptions about human beings underlie the conviction that development and modernization constitute progress, that the developed West points the way for the rest of the world? Does economic growth involve a package that necessarily changes the society, the polity, and the culture along with the economy? This tutorial provides a framework for thinking about these questions, both in the context of the West, and in the context of the Third World.

### **SOC-STD 98HP Is Democracy Possible Everywhere?**

Course ID: 120863

Faculty: Daniel Ziblatt

Next Term Offered: 2017 Spring

Debates today rage about whether democracy is really possible in places like China or the Middle East. This tutorial asks whether there are, in fact, any preconditions for or impediments to the establishment and consolidation of democracy. Among the factors we will consider: mass culture, elite norms, religion, economic development, ethnic pluralism, and associational life.

### **SOC-STD 98KG The Political Economy of the Developing World**

Course ID: 125063

Faculty: Nara Dillon

Next Term Offered: 2017 Spring

This course places the politics of health care in the context of economic development. Although health care and social programs are often considered secondary to economic growth, they have come to play an increasingly central role in development policy. This course explores the interaction between development and health through a survey of different theoretical approaches to development, combined with empirical research on public health, AIDS, family planning, and development programs.

### **SOC-STD 98LI Protest and Conflict in Asia**

Course ID: 125986

Faculty: Kevin Caffrey

Next Term Offered: 2016 Fall

This course inquires into the conditions of protests, self-immolations, and rioting by examining cultural, social, and political difference to look at violence as phenomena. We examine cases such as discord in Sri Lanka; communal violence in South Asia; ethnic wars in Burma (Myanmar); discord and protest in China; ethno-religious violence in Indonesia; or Muslim 'insurgency' in southern Thailand. The course will bring critical attention to the issues of ethnicity, religion, conflict, and protest while analyzing violence as an anthropological category in order to situate current

social and political events.

**SOC-STD 98MD Race in America**

Course ID: 156393

Faculty: Matthew Desmond

Next Term Offered: 2017 Spring

Today we find ourselves in a remarkable historical moment, attempting to make sense of a nation beset by racial contradictions and paradoxes. Astounding racial progress has been documented at the individual level while, at the social level, racial inequality remains entrenched. Racial dynamics continue to permeate contemporary American life, and they bring with them new uncertainties in interpersonal life, workplace relations, and public policy. This course investigates race in America today, examining advances toward racial tolerance, entrenched racial inequality, and theoretical arguments plumbing the ends and means of racial democracy.

**SOC-STD 98ND Mass Violence, Memory, and Reconciliation**

Course ID: 128057

Faculty: Jonathan Hansen

Next Term Offered: 2016 Fall

This tutorial examines the problem of national reconciliation after mass violence. How does a nation sundered by genocide, civil war, or political repression reestablish the social trust and civic consciousness required of individual and collective healing? What makes some reconciliations successful, others less so? The course will engage these and other questions from historical and contemporary perspectives, exploring the legacy of mass violence going back centuries, while comparing reconciliation projects across cultures, countries, and continents.

**SOC-STD 98NQ Global East Asia**

Course ID: 108761

Faculty: Nicole Newendorp

Next Term Offered: 2016 Fall

In this course, we will explore how social life in contemporary East Asia is both influenced by and contributes to processes of globalization. Ethnographic readings on China, Korea, and Japan focus on migration, gender roles, consumption, media, and markets as we trace the role of the global in everyday life for rural and urban inhabitants of a variety of East Asian locations. For these individuals, engagement with the global structures how they make sense of the world and creates desires for future life change.

**SOC-STD 98NU Poor People's Politics in Latin America**

Course ID: 156337

Faculty: Steven Levitsky

Next Term Offered: 2017 Spring

This course critically examines efforts to organize the poor in Latin America, with a focus on the bases of collective action. It covers early patterns of popular sector organization, such as corporatism and populism, revolutionary movements of the 1960s, contemporary parties, social movements, and transnational advocacy networks, and the persistence of clientelism and populism. Finally, the course examines the causes and consequences Latin America's recent turn to the left.

### **SOC-STD 980A Human Rights in Africa**

Course ID: 109963

Faculty: Gwyneth McClendon

Next Term Offered: 2016 Fall

How and to what extent are human rights discussed, contested, and protected in Sub-Saharan Africa? This course considers answers to this question by taking seriously both variation and commonalities across Sub-Saharan African countries. Topics covered include slavery, apartheid, social and economic rights, LGBT rights, the International Criminal Court, and Kony 2012. The study of human rights in any context also requires some understanding of the configurations of power, state institutions and civil society in that context. We therefore also devote some time to considering colonial institutions, contemporary state-society relations, democratization, and social identity groups across SSA countries.

### **SOC-STD 980F Democracy and the Psychology of Inequality**

Course ID: 109644

Faculty: Gwyneth McClendon

Next Term Offered: 2017 Spring

This course explores individuals' and societies' responses to economic inequality in the context of democracy. Why is economic inequality met in some democracies and at some times with discontent and in other democracies and at other times with acceptance or even celebration? How do the sources and structure of economic inequality shape citizens' reactions to it? And do citizens' responses to inequality then actually shape politics and public policymaking in democracies? In investigating these questions, we examine research from political science, social psychology and economics conducted in Sub Saharan Africa, the United States, Western and Eastern Europe, and India.

### **SOC-STD 980J The Politics of Economic Development in the Post-Cold War Era**

Course ID: 156626

Faculty: Nara Dillon

Next Term Offered: 2017 Spring

How can the transition to a market economy be managed? What is the impact of globalization? What are the politics and policies that contribute to rapid economic growth? To answer these questions, this course starts by examining China's rapid economic growth in the last 35 years. The Chinese case is then placed in comparison to other post-communist countries, East Asian developmental states, and finally liberalizing countries in the developing world. Through these

comparisons, the course covers the main theoretical debates about the economic development in the field of comparative politics.

## Sociology

### **SOCIOL 10 Introduction to Sociology**

Course ID: 114222

Faculty:

Next Term Offered: 2017 Spring

Introduces students to the main objects and goals of Sociology\_both for sociology concentrators and curious non-concentrators. Explores the theories of classical authors in the history of sociology (such as Marx, Durkheim, Weber, and beyond). Examines major topics in sociological research (including but not limited to social problems, deviance, inequality, social change, culture, education, social interaction).

### **SOCIOL 26 Introduction to Global Social Change**

Course ID: 109657

Faculty:

Next Term Offered: 2016 Fall

Focuses on the development of global capitalism and the relationship between markets, the state, and civil society. The course will pay particular attention to power and inequality, and to various forms of resistance against globalization.

### **SOCIOL 94 Qualitative Research in Education**

Course ID: 156748

Faculty:

Next Term Offered: 2017 Spring

What can qualitative approaches to research add to our understanding of education, in an era where 'data' are often equated with numbers? In this course, we will examine qualitative methods as a complement and counterpoint to mainstream paradigms in education research. Students will design and implement a small pilot study on an education topic of choice. We will investigate the process of research design, including question formulation, selecting appropriate tools for data collection, and strategies for analyses. The work will be informed by critical reading and discussion of empirical and theoretical scholarship on the intersection of culture, community, and education.

### **SOCIOL 98HA Sociology of Health**

Course ID: 107356

Faculty:

Next Term Offered: 2016 Fall

Examines how culture, politics, and finance "matters" in health care through an exploration of the diverse community health centers and major medical centers throughout greater Boston. Students will enhance their qualitative research skills through ethnographic observation, mapping, and historical and documentary analysis of the services provided and populations served in various clinical settings.

**SOCIOL 98MA Urban Social Problems and Public Policy**

Course ID: 156295

Faculty:

Next Term Offered: 2016 Fall

This tutorial will examine urban social problems and their relationship to public policy solutions through a sociological lens. We will examine social problems that affect city dwellers such as poverty, homelessness, crime, the achievement gap, and health, and their correlate policy solutions including public assistance, housing, policing and incarceration, education policy, health care and more. Students will complete an in-depth independent research project on a social problem of interest, collect their own data, and think through sociological and policy implications. The course will specialize in data collection through the use of qualitative methods such as ethnography, observation, and interviewing.

**SOCIOL 98SC Political Sociology: Power, Citizenship and the State**

Course ID: 156914

Faculty:

Next Term Offered: 2016 Fall

This course reviews major approaches to political sociology through explorations of state formation, civil society, citizenship, democracy, elections, terrorism, media coverage and conflict. A strong emphasis is put on historical analyses and empirical studies. This tutorial guides students through the preparation of a research paper using qualitative and/or quantitative methods.

**SOCIOL 98VA Development in Theory and Practice**

Course ID: 108200

Faculty: Jocelyn Viterna

Next Term Offered: 2016 Fall

Why are some societies wealthier, healthier, and more highly educated than others? And how might we improve the lives of those individuals with the fewest opportunities? The purpose of this course is to investigate whether and how scholarly theories of development map onto the real world practices of development organizations (state development offices, intergovernmental agencies, not-for-profit organizations) and vice versa. Readings in development sociology will be interspersed with individual student analyses of specific development organizations across a range of issues including (but not limited to) gender, politics, the environment, education, health care, and the economy.

**SOCIOL 98WC Sports and Society**

Course ID: 127534

Faculty:

Next Term Offered: 2016 Fall

This course will examine sports through a sociological lens. We will examine processes of

stratification in sports including class, race and gender, as well as sports as a business, the media and sports, and sports and health. Students will do an in depth independent or team based research project on the topic.

### **SOCIOL 105 Sports and Society**

Course ID: 109896

Faculty:

Next Term Offered: 2016 Fall

This course will examine the institution of sports and how it is shaped by society. Is sports a level playing field and meritocracy where the best person or team wins? Or is sports a mirror of an unequal society where power and wealth shape social life? How do class, race and gender shape the sports we play and how we play them? We will consider sports and higher education in the U.S. and at Harvard. We will also look at youth sports, sports as a business, the media and sports, and sports and health. Students will do an in depth research project on the topic and will actively discuss readings in class each week.

### **SOCIOL 108 Inequality at Work**

Course ID: 108275

Faculty:

Next Term Offered: 2016 Fall

The American workplace has become much more diverse over the past 30 years, with women and minorities moving into greater positions of authority. But significant inequalities remain. Why? This course explores how sociologists go about analyzing the reasons for workplace inequalities using a variety of methods from ethnography to surveys to experiments. Using case studies, we pay particular attention to how work can be restructured in ways that increase participation and equality.

### **SOCIOL 126 Mobilizing for Change: Black Lives Matter**

Course ID: 159874

Faculty:

Next Term Offered: 2016 Fall

### **SOCIOL 150 Neighborhood Effects and the Social Order of the City**

Course ID: 108873

Faculty: Robert Sampson

Next Term Offered: 2016 Spring

Ideas about order and disorder have driven debates about the city for over a century. After reviewing classic approaches we will examine contemporary research on neighborhood inequality, "broken-windows" and crime, racial segregation, ethnic diversity and immigration, the symbolic meanings of disorder, community organizations, and competing visions for the uses of public space. Students will conduct field-based observations drawing upon cutting-edge methods employed by urban sociologists to understand the workings of the modern city.

## **SOCIOL 164 Successful Societies: Markers and Pathways**

Course ID: 127922

Faculty:

Next Term Offered: 2017 Spring

Analyzes the markers of societal success and the social conditions that sustain it. Discusses various indicators ranging from the standard economic measures to the human development index, inequality, resilience to shocks, educational, child development and health measures. Considers the role of cultural and institutional buffers (how cultural repertoires and myths feed strong collective identities, cultural and institutional supports for coping with stigma, models of citizenship and immigration, and multi-level governance and their impact on welfare and poverty). Similarly addresses factors that present major challenges, or 'wicked problems', like concentrated urban poverty, well-being of indigenous and other racialized groups and some of the solutions attempted. Particular attention will be put on the United States, Canada, and other advanced industrial societies and to the role of space, institutions, and culture in shaping the conditions for successful societies. Public policy implications will also be discussed.

## **SOCIOL 180 Law, Science, and Society in America**

Course ID: 108974

Faculty: Sheila Jasanoff

Next Term Offered: 2017 Spring

This course explores the tensions, contradictions, and mutual appropriations that characterize the relationship between law, science, and technology in America. It examines how ideas of evidence, expertise, and public reason have changed over the past half-century in response to such phenomena as the rise of the risk society, environmentalism, patient advocacy, and the information revolution. Law is broadly construed to include the activities of legislatures, regulatory agencies, and courts. The course seeks to contextualize the interactions of law, science, and technology in relation to wider transformations in US culture and society.

## **SOCIOL 227 Cultural Sociology and Sociology of Culture: Theoretical Perspectives and Empirical Studies**

Course ID: 156419

Faculty:

Next Term Offered: 2016 Fall

The main topics of this course are: Introduction to a debate: is there a place for creativity and performativity in the sociological study of culture?; 1) the main theoretical debates around culture, social structure and inequality through the classical and contemporary authors and sociological currents, with a focus on the study of cultural practices and styles of consumption; 2) the four dimensions or levels of cultural life in contemporary societies: the creators and their networks, the publics and the market, the local and the global, institutions (schools, museums, etc.), the state and cultural politics.

**SOCIOL 239 Just Institutions (Graduate Seminar in General Education)**

Course ID: 128270

Faculty: Christopher Winship

Next Term Offered: 2016 Fall

Examines the normative, psychological, and sociological underpinnings needed to develop and maintain social institutions that are considered "just". The seminar will design and develop a General Education course for undergraduates.

**SOCIOL 254 Social Structure and Culture in the Study of Race and Urban Poverty**

Course ID: 127924

Faculty:

Next Term Offered: 2016 Fall

The purpose of this course is to critically examine current writings and debates on how social structure and culture affect the social outcomes of the African Americans and immigrants in the US. The relevance of these works for public and social policy will also be discussed.

**SOCIOL 275 Social Network Analysis: Seminar**

Course ID: 119926

Faculty: Peter Marsden

Next Term Offered: 2017 Spring

Concepts and methods for studying social structure using social networks. Approaches to collecting network data; data quality; graph-theoretic, statistical, and visual approaches to analyzing network data, including blockmodels and multidimensional scaling.

**SOCIOL 296A Proseminar on Inequality & Social Policy I**

Course ID: 112352

Faculty:

Next Term Offered: 2016 Fall

The first doctoral seminar in the Inequality and Social Policy three-course sequence, this course considers the effects of policies and institutions in creating or reducing inequality in the U.S. and other advanced democracies, as well as the reciprocal effects of inequality on political activity and policy choices.

Offered 2015-16 as Gov 2340a

**SOCIOL 312 Workshop on Social Networks and Social Capital: Advanced Models and Empirical Applications**

Course ID: 127921

Faculty:

Next Term Offered: 2016 Fall

The workshop brings together quantitative sociologists working with advanced descriptive, computational, causal or network models to empirically analyze issues broadly related to social networks and social capital.

## South Asian Studies

### **PAL 101A Introductory Pali**

Course ID: 137342

Faculty:

Next Term Offered: 2016 Fall

Considered sacred by the Theravada Buddhist tradition of Sri Lanka, India and Southeast Asia, as it was held to convey the actual "words of the Buddha", Pali came to be used as an authoritative, cosmopolitan language throughout the Theravada world. Pali texts display a rich variety of genres, including some of the earliest extant Indian poetry. The course is geared toward allowing the student to read Pali texts as quickly as possible.

### **PAL 101B Introductory Pali**

Course ID: 142471

Faculty:

Next Term Offered: 2017 Spring

Continuation of Pali 101a.

### **PAL 102A Intermediate Pali**

Course ID: 123547

Faculty:

Next Term Offered: 2016 Fall

Developing the skills gained in Introduction to Pali, the student reads texts of greater linguistic complexity in a wide variety of genres. The choice of text can be influenced by the students' particular interests. Where applicable, we will use the Pali commentarial tradition as a tool to understanding the texts, thus providing the student with access to this illuminating but challenging body of material.

### **PAL 102B Intermediate Pali**

Course ID: 122156

Faculty:

Next Term Offered: 2017 Spring

Continuation of Pali 102a.

### **PAL 103R Readings in Pali**

Course ID: 120160

Faculty:

Next Term Offered: 2016 Fall



## Statistics

### **STAT 101 Introduction to Quantitative Methods for Psychology and the Behavioral Sciences**

Course ID: 115226

Faculty: Kevin A. Rader

Next Term Offered: 2016 Fall

Similar to Statistics 100, but emphasizes concepts and practice of statistics used in psychology and other social and behavioral sciences. Topics covered: describing center and variability; probability and sampling distributions; estimation and hypothesis testing for comparing means and comparing proportions; contingency tables; correlation and regression; multiple regression; analysis of variance. Emphasis on translation of research questions into statistically testable hypotheses and models, and interpretation of results in context.

### **STAT 120 Introduction to Bayesian Inference and Applications**

Course ID: 156425

Faculty:

Next Term Offered: 2016 Fall

An introduction to statistical inference under the Bayesian paradigm. Applications include a variety of classic and modern models for high-dimensional, time series and spatial data. Evaluation techniques for modeling assumptions and inference strategies. Hands-on implementation of estimation and inference procedures in R. Knowledge of R programming is assumed.

### **STAT 140 Design of Experiments**

Course ID: 116364

Faculty:

Next Term Offered: 2016 Fall

Statistical designs for efficient experimentation in the physical, life, social and management sciences and in engineering. A systematic approach to explore input-output relationships by deliberately manipulating input variables. Topics include completely randomized and randomized block designs, Latin square designs, balanced incomplete block designs, factorial designs, confounding in blocks, fractional replications, and re-randomization. Each topic motivated by real-life examples.

### **STAT 170 Quantitative Analysis of Capital Markets**

Course ID: 122306

Faculty:

Next Term Offered: 2016 Fall

An introduction to the analysis of capital markets using quantitative methods. Concepts include risk, expected utility, discounting, binomial-tree valuation methods, martingales, continuous time stochastic calculus methods, stochastic discount factors, financial econometric models and Monte Carlo simulations. These concepts are applied to equities, risk management and derivative pricing.

**STAT 201 Statistical Communication and Graphics**

Course ID: 156489

Faculty:

Next Term Offered: 2017 Spring

**STAT 221 Statistical Computing and Learning**

Course ID: 115077

Faculty:

Next Term Offered: 2016 Fall

Computational methods commonly used in statistics: random number generation, optimization methods, numerical integration, Monte Carlo methods including Metropolis-Hastings and Gibbs samplers, approximate inference techniques including Expectation-Maximization algorithms, Laplace approximation and variational methods, data augmentation strategies, data augmentation strategies.

**STAT 244 Linear and Generalized Linear Models**

Course ID: 127856

Faculty:

Next Term Offered: 2016 Fall

The theory and application of LINEAR and generalized linear models, including linear models for normal responses, logistic models for binary and multinomial data, loglinear models for count data, overdispersion and quasi likelihood methods, and models and methods for clustered (e.g., repeated measurement) correlated data.

**STAT 245 Statistics and Litigation**

Course ID: 124149

Faculty:

Next Term Offered: 2017 Spring

Interaction between quantitative methods and law. Teaming with law students: analyze data, prepare expert reports, and give testimony. Learn how to communicate with and present results to untrained but intelligent users, and to defend conclusions.

**STAT 265R Reading Efron**

Course ID: 127770

Faculty:

Next Term Offered: 2017 Spring

Exploration of the statistical contributions of Bradley Efron through study of his writings. Both

deeply influential and deeply controversial ideas will be discussed; topics include statistical foundations and principles, estimating the number of unseen species, self-consistency, empirical Bayes, large-scale inference, and the bootstrap.

### **STAT 329 Special Topics in Bootstrap and Permutation Methods**

Course ID: 110393

Faculty:

Next Term Offered: 2016 Fall

Bootstrap and permutation methods with readings both applied and theoretical. Selection of topics will vary by interest, potentially including any of Bayesian approaches, high dimensional concerns, the wild bootstrap and regression, semi-parametric likelihood with bootstrap techniques, subsampling, and more complex extensions of permutation tests.

### **STAT 340 Random Network Models**

Course ID: 122432

Faculty:

Next Term Offered: 2017 Spring

Random graph models for biological, social, and information networks, including fixed degree, exponential, power law, small world, and geometric random graphs. Estimation and sampling methods for network data.

### **STAT 341 Advanced Topics in Experimental Design**

Course ID: 124715

Faculty:

Next Term Offered: 2016 Fall

### **STAT 342 Causal Graphs in Low and High Dimensions**

Course ID: 108575

Faculty:

Next Term Offered: 2016 Fall

Papers in this area will be read with a skeptical but judicious eye. When could these methods offer something tangible, when might they fail, and how can we know in which circumstance we lie?

### **STAT 399 Problem Solving in Statistics**

Course ID: 123920

Faculty:

Next Term Offered: 2016 Fall

Aimed at helping Statistics PhD students transition through the qualifying exams and into research.

## Stem Cell and Regenerative Biology

### **SCRB 25 Biochemistry and Human Metabolism**

Course ID: 110170

Faculty:

Next Term Offered: 2017 Spring

This course provides an introduction to the principles of biochemistry in the context of human physiology and disease. We will investigate biochemical pathways governing the metabolism of proteins, carbohydrates, fatty acids and lipids, and nucleic acids. Additionally, we will address basic enzymology, bioenergetics, energy storage and release, and hormonal regulation of metabolism. Special emphasis will be given to the impact of biochemical pathways on disease as well as the development of new therapies.

### **SCRB 60 Ethics, Biotechnology, and the Future of Human Nature**

Course ID: 121192

Faculty: Douglas Melton

Next Term Offered: 2016 Fall

Explores the moral, political, and scientific implications of new developments in biotechnology. Does science give us the power to alter human nature? If so, how should we exercise this power? The course examines the science and ethics of stem cell research, human cloning, sex selection, genetic engineering, eugenics, genetic discrimination, and human-animal hybrids. Readings will be drawn from literature in the areas of biology, philosophy, and public policy.

### **SCRB 150 Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease**

Course ID: 114797

Faculty:

Next Term Offered: 2017 Fall

The sequencing of the human genome has revealed the full extent of genetic variation that exists within us as a species. This genetic diversity underlies much of our physical variation as well as our differences in responsiveness to disease stimuli and their treatments. We will explore these and other ramifications of human genetic diversity by applying classical and contemporary genetic tools to the identification of specific genes and pathways that functionally underlie our variable biology.

### **SCRB 160 Experimental Embryology: From Stem Cells to Tissues and Back Again**

Course ID: 125802

Faculty: Paola Arlotta

Next Term Offered: 2016 Fall

This advanced laboratory course will apply experimental approaches and surgical techniques to illustrate critical developmental events during mouse embryogenesis. Particular emphasis will be placed on experiments covering the following topics: fertilization and pre-implantation embryology; reprogramming of adult somatic cells into embryonic stem cells; early organ development; and

surgical manipulation of late stage mouse embryos in utero.

**SCRB 185 Human Disease**

Course ID: 119816

Faculty:

Next Term Offered: 2017 Spring

This course will address both the molecular basis of human disease, and the biological and chemical foundation of therapeutic intervention. The course will include lectures by prominent experts, and analysis of the primary literature.

**SCRB 200 Independent Research in Stem Cell and Regenerative Biology**

Course ID: 108034

Faculty:

Next Term Offered: 2017 Spring

This survey course provides contemporary approaches to the study of stem cell and regenerative biology.

**SCRB 300QC Current Research in Stem Cell and Regenerative Biology**

Course ID: 128039

Faculty: Lee Rubin

Next Term Offered: 2017 Spring

This survey course provides contemporary approaches to the study of stem cell and regenerative biology.

## Theater, Dance, and Media

### **TDM 117 Acting Chekhov**

Course ID: 123900

Faculty: Remo Airaldi

Next Term Offered: 2017 Spring

An exploration of Chekhov's plays from an actor's point of view in order to develop a practical approach to any dramatic text. We will balance the use of analytical skills - playable actions, active verbs, subtext and beats - with the need to free the actor's creative imagination, through exercises and improvisations. A variety of acting techniques will be used in scene work from the plays, including the techniques of Stanislavski, Michael Chekhov, Strasberg, Adler and Meisner as well as non-text-based approaches.

### **TDM 133 Directing Film: Telling the Story and Working with Actors**

Course ID: 109653

Faculty: Marcus Stern

Next Term Offered: 2017 Spring

Students will build scenes based on observed incidents, act and direct them, then, using high-definition video, record and edit them. The course will include study of scenes in film and instruction in the techniques of directing, working with actors, and video production. Emphasis will be placed on clarity of storytelling, eliciting performances from actors, and visceral impact of the filmed events.

## Visual and Environmental Studies

### **VES 18 Works on Paper**

Course ID: 108843

Faculty: Annette Lemieux

Next Term Offered: 2017 Spring

Through image presentations, students will be introduced to the art movements and artists of the 20th and 21st centuries. Using a variety of materials, students will create works on paper for critique that reflect these artists' beliefs and concerns.

### **VES 54S Animating Science**

Course ID: 126181

Faculty: Ruth S. Lingford

Next Term Offered: 2017 Spring

This hands-on class will investigate the cross-overs between science and animation. How can animation communicate abstract ideas? How can science inspire the artist? Students will acquire some fundamental animation skills, and will work on individual and group projects. This class will be suitable for students with an interest either in science or visual art, or both.

### **VES 110R Drawing 3: Drawing as Process and Instrument**

Course ID: 156400

Faculty: Katarina Burin

Next Term Offered: 2017 Spring

An intermediate studio course building upon basic drawing skills, while exploring alternative methods of drawing. Focusing on drawing as process and means, rather than an end itself, we will explore historical and contemporary techniques and ways of using drawing as a "tool", including modes of architectural rendering, technical drawing, and other approaches to drawing in design and the written word. Emphasis is placed on individual projects and developing a personal focus or body of work.

### **VES 125 Surface Tensions**

Course ID: 127178

Faculty: Matt Saunders

Next Term Offered: 2017 Spring

``Surface" considered as formal quality and useful tool. Whether taken to mean literal materials, the chain of ideas cohering a body of work, or painting's Teflon-like durability as cultural tradition, we'll pursue strategies to engage surface: seriality, alternative supports, facture/blur; mechanical tools, casualness and formality. Of particular interest are the challenges posed by seamlessness both in photographic sources and in conversations surrounding abstraction. Emphasis on painting, but other disciplines are welcome.

**VES 125S Postcards from Volcanoes: Studio Course**

Course ID: 128026

Faculty: Matt Saunders

Next Term Offered: 2017 Spring

This is an intermediate painting class grounded in individual projects and group critique. Not limited to conventional forms, we will think broadly about the edge between inchoate material and inscribed meaning. Studio work will be coupled with abundant reading and discussion.

**VES 183 Cinema and the Auteur**

Course ID: 108847

Faculty: Tom Conley

Next Term Offered: 2017 Spring

Studies development of auteur theory in French film and criticism. Readings include Cahiers du cinéma, Bazin, Deleuze, Godard, and Foucault. Viewings include Renoir, American and Italian auteurs, and post-new wave cinemas.

**VES 192 Cinema and French Culture from 1896 to the Present**

Course ID: 123960

Faculty: Tom Conley

Next Term Offered: 2017 Spring

Focuses on relations of cinema to French culture from the silent era to the age of video. Explores film in dialogue with cultural and historical events, development of a national style and signature, a history of criticism. Correlates study of cinema to cultural analysis. Takes up Renoir and poetic realism, unrest in 1930s, France and other filmic idioms (Italy, Hollywood, Russia), new wave directors, feminist and minoritarian cinema after 1980.

**VES 193 Fortunes of a Genre: The Western**

Course ID: 110037

Faculty: Tom Conley

Next Term Offered: 2017 Spring

Studies American westerns through appreciation of genre theory and history with emphasis on French reception. Includes films of Boetticher, Dwan, De Toth, Ford, Fuller, Hawks, Hellman, Lang, Mann, Ray, Vidor, Walsh, et al.

**VES 250R The Live Film: Graduate Production Course**

Course ID: 110049

Faculty:

Next Term Offered: 2017 Spring

A course to pursue creative production within a rigorous studio art/film context, this artist's

colloquium explores retreating boundaries between the fixity of film and the live-ness of performance. We will consider where early cinema touches performance art meets dance connects with broadcast television relates to live streaming consorts with sculpture associates to theatrical sets. The course focus is the creation of new work. Special attention is given to the development of individual artistic processes.

**VES 287 Cinema and Nation**

Course ID: 108608

Faculty: Eric Rentschler

Next Term Offered: 2017 Spring

This course addresses the role of modern media in the formation of local and global identities. In that endeavor we will consider exemplary films from a number of nations as well as pertinent historical and theoretical texts.

Women, Gender, and Sexuality, Studies of

**WOMGEN 1200FH Our Mothers, Ourselves: Postwar American Feminist Thought**

Course ID: 123545

Faculty:

Next Term Offered: 2016 Fall

The classics of American postwar, mainstream feminist thought are sometimes assumed, sometimes reviled, but rarely re-read. In this seminar, we will read critically across four decades of widely-read, influential feminist books, keeping constantly in view the philosophical and political, psychological and historical, legal and ethical questions at the heart of women, gender, and sexuality studies today.

**WOMGEN 1211 Queer Practice**

Course ID: 156143

Faculty:

Next Term Offered: 2016 Fall

Is there a particularly "queer" way to live? Does a queer perspective mitigate for certain forms of social, interpersonal or political action? Are there sets of vocations, engagements or relationship formations that are, in and of themselves, distinctly queer? Or is queerness something that can infuse or transform pre-existing modes of personal or relational action? Is a university education or academic queer theory necessary, or even useful, for these endeavors? Students will examine the connections and disconnects between academic work in gender and sexuality studies and the ways feminist and LGBTQ politics are imagined and lived within contemporary activist communities.

**WOMGEN 1247 I Will Survive: Women's Political Resistance Through Popular Song**

Course ID: 156084

Faculty:

Next Term Offered: 2016 Fall

This course will examine how women, through popular music, have articulated clear political analysis to their oppression that has reached large audiences and become foundational to American culture. We will begin with African-American blues in the early 20th century and moving through jazz, torch singing, folk, girl groups, disco, and contemporary song. Along their music readings we will include biographical, historical, and critical texts that will place these women in their artistic and political contexts. Performers studied will include, among others, Bessie Smith, the Boswell Sisters, Billie Holiday, Marian Anderson, Peggy Lee, Joan Baez, Gloria Gaynor, and Amy Winehouse.

**WOMGEN 1407 Harlots, Dandies, Bluestockings: Sexuality, Gender, and Feminism in the 18th and 19th Centuries**

Course ID: 156046

Faculty:

Next Term Offered: 2016 Fall

How did social forces in the 18th and 19th centuries shape (and contest) new theories of womanhood, sexuality, and political equality? Readings from a variety of literary and political sources, including "*Fanny Hill: Memoirs of a Woman of Pleasure*," "*Moll Flanders*," "*The Picture of Dorian Gray*," "*Dr. Jekyll and Mr. Hyde*," "*A Vindication of the Rights of Women*." Areas of inquiry: prostitution, the suffrage movement, motherhood, property rights, psychology, manliness, sexology, Victorian pornography.